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This survey of Arkansas' higher education system includes information on junior colleges. It is estimated that, by 1980, the state will have 11 junior colleges with an enrollment of 22,463. As the new ones are established, they are expected to provide most, if not all, of the less-than-baccalaureate programs. At present there are two public community junior colleges, one public junior college branch of the State University, and four private church-related colleges. These last offer transfer or 2-year general programs and training for personnel of their own denominational group, but little vocational/technical training. The statewide system of 15 area vocational/technical schools offers some academic course work beyond high school. Three current problems: (1) coordination of vocational school programs with the junior colleges to avoid a funding crisis, (2) local pressures to convert community colleges into 4-year institutions, and (3) present shortage of funds that may extend development of the junior college system to 10 or 15 years. The Committee on Junior College and Vocational-Technical Programs has 15 recommendations for a system of comprehensive colleges and the coordination of their programs with the area vocational and other schools in the state. Tables show details of projected expenditures for the various segments of higher education through 1981. (HH)

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COMPREHENSIVE STUDY
OF HIGHER EDUCATION IN ARKANSAS

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Commission on Coordination
of Higher Educational Finance

Little Rock, Arkansas
September 4, 1968

UNIVERSITY OF CALIF.
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CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

JL 690 062

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LETTER OF TRANSMITTAL

September 4, 1968

**W. E. Darby, Chairman
Commission on Coordination of
Higher Educational Finance
Little Rock, Arkansas**

Dear Mr. Darby:

The enclosed report concludes the study which was mandated by action of the Arkansas Legislature and Governor in Act 490 of the 1967 Regular Session of the General Assembly of the State of Arkansas.

The faculties and administrative officers of the Arkansas public and private universities and colleges who cooperated in this study, members of the Coordinating Committee, and the panel of general and special consultants from outside the State who brought to the study the benefit of their wide experience feel that the recommendations advanced, if effectively implemented, will bring about a much improved and strengthened program of higher education in Arkansas. A greater efficiency in the use of available resources for higher education should also accrue to the State. It is felt that these accomplishments should fulfill the intent of the original legislation calling for the study and also the inherent capacities of the colleges and universities in Arkansas to serve the people of the State.

On behalf of the panel of consultants, I express deep appreciation for the work of the members of the several Technical Committees, the Coordinating Committee, President's Committee, and members of the staff of the Commission on Coordination of Higher Educational Finance. These and officials of other agencies in Arkansas were essential to a successful completion of the study and production of this report.

Very truly yours,

/S/ James T. Sparkman

**James T. Sparkman, Director
Comprehensive Study of Higher
Education in Arkansas**

ACKNOWLEDGMENTS

On the National scene, it is becoming increasingly evident that the best statewide studies of higher education draw heavily on the educational leadership and resources of the colleges and universities located in the State. The design of this study, therefore, sought to involve this leadership in all phases of its work; and a multitude of persons in Arkansas contributed materially to it.

It would be impossible to extend appropriate thanks to all who have assisted in bringing the study to a successful conclusion; however, expression of appreciation by special mention in this section of the report is due to Dr. E. L. Angell, Director, Commission on Coordination of Higher Educational Finance; Dr. M. Olin Cook, Associate Director, Commission on Coordination of Higher Educational Finance and members of the Commission staff; members of the Coordinating Committee; members of the President's Committee; members of the various Technical Committees; Dr. Barton A. Westerlund and the staff of the Industrial Research and Extension Center for their assistance in compiling socio-economic and other data; and administrative officials and faculty of all public and private institutions of higher learning in Arkansas, who participated in the study.

CHAPTER I

SUMMARY OF RECOMMENDATIONS

This report points out ways that Arkansas can both expand and strengthen the total higher educational enterprise effectively and with greatest economy of available resources by balancing diversity among the different types of programs of higher education (junior college and vocational-technical, four and five-year undergraduate, graduate-professional and research, extension and public service, library, and student aid programs) within cooperative planning and programming involving all of the colleges and universities within a statewide coordinated plan. Based on the findings and judgements described in the body of the report, the CONSULTANTS and members of the COORDINATING COMMITTEE make the following recommendations.

Recommendations on Junior College and Vocational-Technical Programs:

1. There should be established a statewide system of public comprehensive community junior colleges offering higher educational opportunities (vocational, technical, continuing education, and college transfer) of two years or less duration and desirably available within commuting distance of all citizens of the State; and further, that these institutions should be developed as rapidly as the State's financial resources will permit.
2. Each community junior college in Arkansas should offer, as soon as it is economically feasible, broad program areas of education for transfer to the bachelor's degree program (university parallel), occupational education (vocational-technical), general education, continuing education, community services, and guidance and counseling.
3. Each community junior college should have an "open-door" admissions policy. Any high school graduate or any person over 18 years of age who seems capable of profiting by the instruction offered should be eligible for admission.
4. Student fees at community junior colleges should be kept to a minimum; it would be desirable to provide a more flexible determination of the amount of State funds for the general operation of each college. Operating funds shall be allocated on a sliding scale, from 50 per cent of the total operating budget as approved by the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board, to 33 1/3 per cent, the percentage to depend upon the enrollment of the institution and, to some extent, the ability of the district to support a community junior college. The percentage should be high for beginning institutions and decreasing as the enrollment increases.
5. The community junior college system at the State level should remain under the direction of the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board as provided within the legal framework of Act 404 of 1967.
6. An adequate number of staff members should be added to the Commission with sole responsibility for implementation of the community junior college movement. These staff members should be organized as a specific community junior college unit working within the Commission.
7. When a community junior college is established in an area where a State area vocational-technical school now exists, the two should be combined into a comprehensive community junior college.
8. Steps should be taken to explore the possibility of closer cooperation between the State Vocational Board and the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board.

9. Act 404 as amended by the 1967 General Assembly should be amended further to provide clearly for the replacement of members of the local initial board, and to permit candidates for board membership to run on a non-partisan basis; and further, to permit counties to pay out-of-district tuition for their students who are attending the community junior college in an established district.
10. Each community junior college should offer evening and summer courses.
11. In order to improve the State system of community junior colleges, the State colleges and universities should offer graduate programs for the preparation of community junior college instructors and administrators.
12. Each college should provide for all students necessary guidance and counseling to enable each one to know and accept his strengths and limitations and to select realistic goals in choosing the programs most suited to him in light of objective information and his personal situation.
13. A committee composed of both junior college and senior college representatives should be established to study problems of articulation which may arise as the junior college system develops.
14. It is desirable that the president of each of these institutions possess a doctor's degree and be committed to the educational purpose of the comprehensive junior college. The local board shall consult with and have the advice of the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board in the selection and employment of a president.
15. The Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board should endorse the desirability of establishing community junior colleges in a statewide district system identified in the three plans as outlined in the report of the Committee on Junior Colleges and Vocational-Technical Programs, recognizing that the districts may vary widely from those specifically recommended in the plans.

Recommendations on Four and Five-Year Undergraduate Programs:

1. The authority of the Commission on Coordination of Higher Educational Finance should be expanded to include approval or disapproval of all new units of instruction at the undergraduate level. The term "new unit of instruction" should include the establishment of a college, school, division, institute, department, and curricula or majors leading to a degree program. The term "new unit of instruction" should not include the approval of separate courses.
2. The Commissions on Coordination of Higher Educational Finance should be given the authority to review existing programs at the undergraduate level; and further, the Commission should be authorized to discontinue programs in which there is found to be unnecessary and wasteful overlapping and duplication.
3. In cooperation with an advisory committee composed of representatives of the public senior colleges and universities, the Commission on Coordination of Higher Educational Finance should develop criteria for establishing new undergraduate programs or new units of instruction, and where the need is evident, recommend establishment of such programs.
4. Consideration should be given to the establishment in the senior colleges of programs of less than the baccalaureate degree level to satisfy an immediate and growing need for sophisticated technical programs, para-medical programs, and other occupational programs in areas where a community junior college is not available to offer these programs.
5. In the future new undergraduate programs in Agriculture, Architecture, Engineering, Forestry, Home Economics, and Pharmacy should be authorized only if the actual need and demand for such programs is

evident.

6. The two undergraduate degree programs in Nursing presently being offered at the University of Arkansas Medical Center and State College of Arkansas should be expanded to the maximum, and consideration given to the establishment of other additional degree programs cannot meet the needs of the State.
7. Presently five Associate Degrees in Nursing programs are authorized—two at the State community junior colleges and three at State senior colleges. Additional programs should be established in areas where clinical facilities are available and there is evidence of sufficient interest on the part of students. With the establishment of additional community junior colleges, the Associate Degree in Nursing Program should be established at these institutions rather than at senior institutions in the same area.
8. The three two-year programs in Agriculture should be improved in quality and reorganized to serve better the agricultural interests in the area in which they are located and provide quality work at the freshman and sophomore levels for students who wish to transfer and continue their college work in Agriculture.
9. The undergraduate program in Agriculture at Arkansas State University should be further developed to meet acceptable criteria.
10. Since education and training in the field of Agriculture is basic to the economy of the State, the Commission on Coordination of Higher Educational Finance should encourage the establishment of an inter-institutional committee, representing the institutions involved in any way in agriculture, to insure that all resources possible are brought to bear on needs in this area.
11. Until a statewide system of community colleges is developed, the State senior institutions should continue to accept students on practically an "open-door" policy for all high school graduates. If the capable but poorly prepared student does not receive at the institution training in sub-college courses designed for that purpose, the result will be the lowering of institutional instructional standards or the elimination of such students. If such an "open-door" policy is to be followed, the sub-college courses should be offered by the institutions.
12. Admission requirements for out-of-state students should remain for the present within the jurisdiction of each particular institution. It is recommended, however, that these requirements be substantially higher to insure the selection of students who have demonstrated college potential.
13. While for the present the specifics of admissions and retention policies should remain with the individual institutions, the Commission on Coordination of Higher Educational Finance should be empowered to approve, if necessary, minimum admission requirements.
14. The State Constitution should be amended in such a way that the several institutional Boards of Trustees be empowered to establish the salaries for the administrative, faculty, and research positions at their respective institutions in accordance with general policies governing salaries set by the Commission on Coordination of Higher Educational Finance.
15. Public undergraduate education in Little Rock should be expanded to meet the needs of citizens of the area.

Recommendations on Graduate-Professional Programs and Research:

General Recommendations

1. In planning the expansion of graduate and professional education, consideration should be given to the resources of the State, the existing and foreseeable future needs, the location of population centers, and the

presence of established institutions of higher education.

2. New programs should be permitted to develop only if they do not directly weaken programs already in operation, and if they respond to demonstrated needs of the State and Nation.
3. Continuous attention should be exercised to ascertain any programs that should be eliminated due to the cessation of need.
4. Provision should be made for the expansion of graduate and professional education and research activities in Central Arkansas.
5. The expansion of graduate education in other areas of the State also should be pursued where the need justifies such growth.
6. The Commission on Coordination of Higher Educational Finance should be granted the authority to approve all graduate degree programs in the State supported colleges and universities, and the name of this agency should be changed to the "Commission on Higher Education."
7. The Commission on Coordination of Higher Educational Finance should encourage the development of cooperative graduate programs at both the master's and doctoral levels.

Recommendations for an Advisory Committee on Policies Concerning Graduate-Professional Education and Research

8. A permanent Committee on Graduate and Professional Programs and Research should be established.
9. This Committee's function should be to serve in an advisory capacity to the Commission on Coordination of Higher Educational Finance with respect to policies concerning graduate and professional education and in research.
10. Membership of the Committee should include representatives from each State supported institution of higher learning. These representatives should be appointed by the Director of the Commission on Coordination of Higher Educational Finance from a list provided by the president of each institution. In order to assure a balance of competencies and external expertise, additional members may be selected who will represent special professional, educational, and research areas.

Recommendations for Master's and Specialist Degree Programs

11. A graduate program's objectives, the needs of the region, the availability of essential resources, and the ability to satisfy acceptable standards shall determine whether a graduate program is to be conducted at a specific institution.
12. The following are the recommended criteria for master's and specialist degree programs:
 - A. Each program should be dependant upon full-time faculty in the primary department.
 - B. The faculty should be comprised of those persons who have demonstrated competence to conduct graduate work in their particular field and who have also manifested research skill. All graduate faculty shall hold the appropriate terminal degree or its equivalent. Competence shall be judged by members of the graduate faculty, the graduate dean, and the academic vice-president.
 - C. The size of the graduate faculty should be adequate to enable each student to complete the required course work for his degree within a reasonable period of time while concurrently limiting the faculty

teaching load to an acceptable level. Course offerings which are exclusively for graduate students should be required for at least 50 per cent of each student's graduate program.

- D. The student-faculty ratio should be such as to enable the department to render adequate scholarly consultation and research guidance to each student in the program.
 - E. Funds should be available in such quantity as to provide the commonly agreed upon basic equipment, library materials, and other essential items for each program.
 - F. Financial support should be adequate to maintain faculty salaries for all ranks at such a level that the institution's average salary in each graduate program will be competitive on the National scale. It is suggested that the level be competitive, with institution offering a similar program.
 - G. Physical facilities (classrooms, laboratories, faculty offices, and libraries) should be of such quality and adequacy as to assure the attainment of instructional and research standards defined by the institution and its regional and professional accrediting agencies.
 - H. Research is recognized as requisite to the growth capability and effectiveness of instruction at the graduate level. To foster this facet of a graduate program, sufficient time, funds, and facilities should be available for faculty research.
 - I. No graduate program should continue which does not graduate an average of three candidates a year during a five-year period.
 - J. Before initiating a new program, it is suggested that at least two off-campus consultants, who are recognized in the field, be engaged in an advisory capacity. The result of the consultants' report should be shared with the Commission.
 - K. Standards of faculty and courses in ancillary fields should be of sufficient strength to support the major field.
13. The foregoing standards should be regarded as minimal. Whenever a proposed graduate program does not satisfy these criteria, it should not be established; nor should deficient programs be permitted to continue.

Recommendations for Doctoral Degree Programs

14. Advanced graduate programs at the doctoral level are essential in fulfilling the State's needs in the various professions and other occupations. In an effort to promote standards of excellence at the doctoral level, it is recommended that no programs should be permitted to operate which fail to comply with the subsequent minimum standards. The number of programs that will be allowed to operate in the State shall be determined by the magnitude and breadth of the need, availability of resources, and the number of institutions that can fulfill the established standards. The criteria are as follows:
- A. Approval for doctoral programs must be contingent upon demonstrated availability of resources at such a level that the prescribed standards of excellence can be attained. It is advocated that the financial support of a doctoral program must be considered to be an integral part of the total instructional financing of a university rather than the financing of an academic appendage superimposed on other programs. This requires distribution of a university's resources among its diverse services according to the aims and objectives which have been established by the faculty, administrative personnel, and Boards of Trustees. It is incumbent upon an institution of higher learning to develop a balanced curriculum between its various levels of programs. It is recommended that new programs which will deprive existing ones of strength and effectiveness not be created; however, it is recognized that an institution may elect to restrain the expansion of programs in one

area or at one level to permit the directing of resources to another area and/or level.

- B. A doctoral level program shall usually be based on prior production in accredited master's degree programs in the same and related fields. In special programs not preceded by master's degree production, the institution shall have well-developed undergraduate programs in related fields.
- C. The program shall be dependent upon a strong cadre of full-time faculty in the subject area who have been recognized as possessing competency in teaching and research at the doctoral level. The faculty who are responsible for advising and directing research programs of Doctor of Philosophy students must have demonstrated research ability beyond the minimum requirements for their own doctoral degree.
- D. The size of the faculty in a doctoral program in any field shall be sufficient to enable a full-time student without academic deficiencies to take all the required course work within a three-year period beyond the bachelor's degree.
- E. Faculty in programs in ancillary fields must show strength beyond the minimum required for the faculty in master's degree programs.
- F. The student-faculty ratio should not exceed the ability of the department to render adequate scholarly consultation and research guidance to each student in the program.
- G. In recognition of the extensive individual guidance which must be rendered by the faculty to doctoral candidates in their research and to the imperative of faculty research and to the imperative of faculty research to sustain their competency, the maximum teaching load should be restricted to the extent that each faculty member has adequate time to provide these services.
- H. The faculty salaries shall be sufficient to attract qualified personnel for doctoral instruction and research. These salaries shall be competitive with institutions offering a similar program.
- I. Physical facilities (classrooms, research equipment and laboratories, library materials, faculty offices, etc.) shall be of such quality and adequacy to assure the attainment of instructional and research standards defined by the institution and its regional and professional accrediting agencies.
- J. Funds should be available to permit doctoral candidates to serve as either teaching or research assistants.
- K. There should be adequate enrollment in the program to provide a desirable scholarly and student climate. After the sixth year of operation each doctoral program shall be expected to graduate at least three candidates.
- L. In the process of preparing for the establishment of a doctoral program, at least two persons from off campus, who are recognized in the field being considered, should be engaged in a consultative position. (It is suggested that the North Central Association of Colleges and Secondary Schools or the Council of Graduate Schools in the United States be consulted for suggestions.)

Recommendations for Programs in Professional Fields

- 15. Before developing new professional programs, the present programs should be strengthened; and the feasibility of establishing consortiums or other cooperative arrangements between the State of Arkansas and other states should be carefully considered.

Recommendations for Human Medicine

16. It is evident that the University of Arkansas Medical Center is facing a financial crisis, but a similar statement could be made of almost every university medical center in this country. In the case of Arkansas, however, the problem is comparatively more acute because of the limited resources of the State and the great demands placed upon it by all segments of the rapidly growing system of higher education.

At the moment it appears unlikely that sufficient State revenue will become available through traditional channels to meet the crucial needs of the Medical Center in the years immediately ahead. Under the circumstances, every possible additional source of revenue should be given most careful consideration. It is therefore recommended that:

- A. Financial assistance for the support of beds for the indigent sick be sought from municipalities and counties. There is substantial precedent for contractual arrangements of this nature, e.g., the University of Alabama Medical Center receives from Jefferson County \$3.5 million annually for these purposes.
 - B. The number and percentage of the hospital's private patients be increased as rapidly as possible to the point where they represent half of those receiving care. This could be accomplished by conversion of some of the present charity beds to semi-private and private beds and the activation of the presently unused 120-bed are for these purposes.
 - C. The administration, faculty, and staff of the University of Arkansas Medical Center study this potential source of income, availing themselves of experience in the procedure with other state medical centers which admit substantial numbers of private patients.
17. A comprehensive study be made of the organization, operation, and financing of the Medical Center of the University of Arkansas and its functional units. Emphasis should be given to the adequacy of the present financial base of the Center to meet in a qualitative manner the responsibilities expected and required of the Center in teaching, research, and care of patients. In the recommendation of an adequate financial base for the Center, this study should consider carefully all sources of additional income.
- A. Appropriate level of State support for the teaching and research functions.
 - B. Appropriate level of State subsidy for care of indigent patients.
 - C. Enhanced income from private patients by allocation of a significant number of hospital beds for such patients.
 - D. Increased income from professional fees to full-time staff for private patient care.
 - E. Potential of private gift support for enrichment of the Medical Center activities.
 - F. Possible financial support from local governments for support of patient care for indigents from their locales.
 - G. Potential of increased funding from Federal grant agencies.
18. The proposed study should consider in detail the costs of operation of the University Hospital to: (a) ascertain fiscal effectiveness of the present operation; and (b) to make recommendations concerning fiscal control and as to the most effective procedures for billing and collection to maximize hospital income.

Recommendations for Veterinary Medicine

19. The State should not establish a School of Veterinary Medicine in the foreseeable future due to the large investment that would be required. The small number of potential students would result in a high per-student cost. It is recommended that cooperative arrangements be pursued further with other states that currently have or plan to operate programs in Veterinary Medicine for the purpose of enrolling Arkansas students in these programs.
20. Compensation to cooperating states should be adequate to cover the actual cost of instruction and administration.
21. Loans should be available to students from Arkansas to cover other expenses germane to veterinary medicine education.
22. Programs in Veterinary Technology should be established in Arkansas to alleviate an anticipated shortage of veterinary technologists.

Recommendations for Dentistry

23. The State of Arkansas should not establish a School of Dentistry in the foreseeable future. A high per-student cost resulting from the small number of potential students shows that cooperative education arrangements with other states should be made.
24. Compensation to cooperating states should be adequate to cover the actual cost of instruction and administration.
25. Loans should be available to students from Arkansas to cover other expenses germane to dental education.

Recommendations for Legal Education

26. The State should plan to expand the Little Rock division of the School of Law into a full-time day and night operation by 1980 to the extent that there is demand for legal education.
27. The Law School support should be expanded to meet an anticipated enrollment of 1,000 students on the two campuses prior to 1980.
28. The law libraries should be improved in line with the program of the School of Law, and every attempt should be made to bring them up to professionally acceptable standards by 1980.

Recommendations for Research Activities

29. Research and graduate education are inseparable. Without a vigorous and ambitious research program the instructional endeavor, especially at the graduate level, will be seriously jeopardized because it will not attract competent faculty or students. Furthermore, the instructional program will fail to respond to needs which are continually developing in society. To foster instruction and research, the following recommendations are being proposed:
 - A. State funds in support of faculty and graduate student research should be increased; and the appropriation for institutionally sponsored faculty research, excluding organized research such as research bureaus and experiment stations, should be made in accordance with a formula approach to be developed by the Commission with the assistance of the Advisory Committee on Graduate and Professional Programs and Research.

- B. State research funds should be used as much as possible for matching purposes to attract research grants.
 - C. State funds should be used to support, in the entirety, research that is not necessarily contractual research.
 - D. Each institution of higher learning should ascertain how funds may be used to foster its research program so as to recognize Federal commitment to research and the large amount of funds being appropriated for this activity.
 - E. A statewide grant officer should be appointed to the staff of the Commission on Coordination of Higher Educational Finance to represent all of the State's colleges and universities in Washington. This officer should have offices in Little Rock and Washington, D. C. His role should be restricted to a voluntary relationship with each institution to assist with the identification of Federal and private funds to foster institutional objectives and to assist with the preparations of proposals.
 - F. Specialized research facilities created to serve the needs of society should be well supported by the State, specifically in the fields of human behavior, economic and resource research.
 - G. The colleges and universities should be encouraged to become actively involved in the Research and Development Centers and the Regional Educational Laboratories and to sponsor summer research fellowships for faculty members.
30. All college and university libraries should be brought up to the quantitative standards of the Association of College and Research Libraries by 1980. To begin graduate and professional programs, a modern library collection is an absolute necessity for an educational institution. None of the libraries in the State supported institutions of higher learning have collections of adequate size and quality to have a full program of professional and graduate courses.
31. The State should establish a fund for the purpose of providing financial assistance to graduate students. In 1965, 43 per cent of all graduate students in the United States received stipends of some kind (56 per cent were research assistants). It is recognized that some support is obtained from the Government and private foundations, and that many students received assistance through teaching and research which is funded through the regular appropriation; but it is necessary to have some free funds for attracting able scholars.

Recommendations for Extension and Public Service:

- 1. The Commission on Coordination of Higher Educational Finance should be requested to conduct, or cause to be conducted, a study in depth of the State's immediate and long-range needs for extension and public service programs and the funds for this purpose be provided by the Legislature. In addition, a comprehensive, coordinated statewide plan for continuing education in Arkansas should be developed under the direction of the Commission.
- 2. Extension and public service programs should not be expected to operate totally on a self-supporting basis.
- 3. State legislation should be initiated to allow some type of payment to faculty members of public institutions of higher learning for instruction in these classes in addition to regular salary for the normal teaching load. This is common practice in most states, and it is essential to do this if Arkansas is to make the progress that it should in this area.
- 4. A committee composed of representatives from the various public institutions of higher learning, adult education agencies, and the State's educational television authority should be appointed by the Commission

on Coordination of Higher Educational Finance to serve in an advisory capacity to the Commission in the areas of extension and public service.

Recommendations on Libraries:

1. The University of Arkansas Library:

This library will require greatly increased financial support to match the development of other university libraries in the region. If the University of Arkansas Library expenditures are not increased, it will leave the library in a poor comparative position; and it is doubtful whether this present rate of expenditure will enable it to overcome deficiencies in book resources and staff, to meet the needs of new educational programs, or to keep abreast of inflationary costs of materials. It is recommended that the library expenditures to 1980-81 for the University of Arkansas Library be at a level high enough to meet the Association of College and Research Libraries standards.

2. The Senior College Libraries:

- A. Maximum effort should be expended toward bringing these libraries up to the the standards recommended by the Association of College and Research Libraries for book and periodical collections.
- B. Five volumes per year per student are needed for annual collection growth. In view of the wealth of materials being published, a college library can hardly achieve broad representations with acquisitions of less than 5,000 volumes per year.
- C. To meet acceptable criteria, a minimum periodical subscription list of 600-800 titles is desirable.
- D. An American Library Association publication, **Choice: Books for College Libraries**, lists 257 basic reference books which the editors believe should be on the shelves of every academic library. A reasonable norm, even for the smallest college, should be a minimum of 75 per cent of the total group of 257 titles.
- E. Three professional librarians should constitute the minimum number required for effective service. In addition to the professional librarians, the library should have an adequate non-professional staff, normally two clerical workers for each professional librarian. Student assistants should be employed on the basis of 20 hours of student work for each full-time employee.
- F. Seating should be provided for not less than 25 per cent of the student enrollment.
- G. There should be a stack or shelving space equivalent of one square foot per 10 volumes (allowing room for expansion to 15 volumes per square foot).
- H. One hundred feet of floor space should be provided for each person engaged in library technical services.

3. Junior College Libraries:

- A. Recommended norms for junior college libraries indicate that at least 20,000 well-chosen volumes, exclusive of duplicates and textbooks, should be available in institutions with fewer than 1,000 students, and proportionately more for larger colleges—5,000 volumes for every 500 full-time equivalent students beyond 1,000.
- B. A reasonable standard for growth should be 1,000 volumes per year.

- C. A suggested reasonable standard for the junior college libraries is a current list of 200 periodical titles, including most of those indexed by the **Reader's Guide to Periodical Literature**.
 - D. A junior college library should maintain 100 of the 257 titles on the Choice "Basic Reference Collection".
 - E. A minimum of two professional librarians and two clerks plus adequate part-time student assistance is recommended for a junior college of 20,000 volumes serving up to 500 students.
 - F. Junior college libraries should provide seating for at least one-fourth of their student enrollment.
4. **Library Cooperation:**
- A. Financial assistance should be given to the University of Arkansas Library if it is to continue to carry the burden of inter-library loan service.
 - B. Exploration of cooperative processing as well as cooperative acquisition among Arkansas libraries needs to be made.
 - C. The Union List of Periodicals of the Arkansas Federation of Associated Colleges in use by the private colleges should be expanded to include holdings in all colleges and universities in order to prove a beneficial means of furthering inter-library service.
 - D. Cooperative programs for the purchase and loan of microfilm between libraries should be developed.
 - E. A regional government depository for the State should be established for the libraries.
 - F. Maximum effort should be made to bring the holdings, facilities, and professional staff of professional libraries, such as Law and Medical Libraries, up to acceptable professional standards by 1980.

Recommendations on Student Aid Programs:

- 1. A Division of Student Financial Aid should be established under the direct supervision of the Commission on Coordination of Higher Educational Finance and should be staffed in order to conduct adequately its functions and responsibilities.
 - A. This Division should take over the functions and assets of the Student Loan Guarantee Foundation of Arkansas.
 - B. This Division should receive and administer any student aid funds appropriated by the General Assembly. It should be the responsibility of this Division to administer student aid on a comparable basis for all students and for all institutions and to see that student aid is based on need and the student's ability. In making grants to students, total student aid available should be considered in each case.
 - C. The Division should have an advisory committee, drawn from the staffs of Arkansas institutions, to recommend operating procedures and policies to the Commission on Coordination of Higher Educational Finance in the area of financial aid.
- 2. The General Assembly should appropriate sufficient funds to the Commission on Coordination of Higher Educational Finance for the purpose of supplying partial financial aid to those Arkansas students who are in need of such each year.

- A. With these funds a State student aid program (grants and/or scholarships) should be established for needy students. A central statewide source of application and verification of need should be established by the Commission. Students awarded aid should be permitted to attend any public institution in Arkansas. The maximum aid available for each student should not exceed \$600 per year.
 - B. The Commission on Coordination of Higher Educational Finance should audit the financial aid expenditure of the institutions to determine if approved procedures were used in awarding financial aid.
 - C. These awards should be in the form of a grant to the qualified recipient.
3. There should be funds appropriated to be used as "seed money" for the State to guarantee loans made to students by private lending agencies.
 4. The State should establish a fund for the purpose of providing financial grants to graduate students. The State should also appropriate funds which would allow institutions to take advantage of student aid programs for graduate students where matching funds are necessary.
 5. If funds are not available to students under the provision of this program, it may be necessary for the State to explore the possibility of other types of financial arrangements to provide funds for loans to students.

Recommendations for a Coordinated System of Higher Education in Arkansas:

1. The State should create a central coordinating agency to promote the development of a coordinated system of higher education in Arkansas; and further, the present Commission on Coordination of Higher Educational Finance should be designated as the agency to assume this function.
2. Since the title "Commission on Coordination of Higher Educational Finance" will no longer be descriptive of the role of this agency, it should be changed to "The Commission on Higher Education", which would be in keeping with its expanded role and authority.
3. The purpose of the new Commission should be to promote the development and operation of a coordinated system of higher education of the highest quality that can be maintained by the resources of the State.
4. The Commission shall consist of 10 members appointed by the Governor and confirmed by the Senate. The terms of office of members of the Commission are to be 10 years, with the term of office of one member expiring and one new member's term beginning on January 1 of each year. No more than two members of the Commission are to be appointed from any one congressional district, as such districts were established by Act 297 of 1951. No more than three members of the Commission at any one time are to be graduates of any one State university or college, and no members of the Boards of Trustees of any State college or university shall be eligible for membership on the Commission.
5. Each of the public institutions of higher learning (junior colleges, senior colleges, and universities) should retain their individual boards, and each of these boards shall continue to serve its respective institution as now provided by law.
6. The present Commission on Coordination of Higher Educational Finance in its new role as the Commission on Higher Education shall be authorized to:
 - A. Prescribe the roles and functions of public institutions of higher learning; determine the need for and recommend to the Governor and the General Assembly the establishment and location of new

institutions, branches, and centers; and recommend any change in status of existing institutions, for example, a college becoming a university.

- B. Request and receive any information deemed necessary of public institutions of higher learning.
- C. Approve or disapprove, based upon need, adequacy of staff and adequacy of funding, all new units of instruction, research or public service. The term "new unit of instruction, research, or public service" should include the establishment of a college, school, division, institute, department, new curricula or majors leading to a new degree program, extension service, or other unit in any field of instruction, research, or public service not therefore included in the program of the institution. The term does not include reasonable and moderate extensions of existing curricula, research, or public service programs which have a direct relationship to existing programs; and the State Commission may recommend to the respective boards the discontinuance of programs which are found to be unnecessary or a needless duplication.
- D. Approve minimum and maximum tuition fees for both in-state and out-of-state students for all public institutions of higher learning; and further, to set minimum and maximum admissions standards.
- E. Recommend and approve the level of funding and method of distribution of State supported scholarships and loan programs, and serve as the coordinating agency for Federally financed student loan and/or scholarship programs.
- F. Review, evaluate, and coordinate budget requests for State colleges and universities and present to the Governor, prior to each regular session of the General Assembly, a single budget report containing the recommendations for separate appropriations to each of them. The recommendations should be based upon standard techniques of objective measurement of need and unit cost figures arrived at through the use of comparative data secured from the various institutions, applied in an impartial and objective manner; and comparisons should be made not only between similar functions of institutions in Arkansas, but also between Arkansas institutions and similar functions of institutions located in other states.
- G. Conduct continuing studies at the public universities and colleges in all matters involving finance and capital improvements; and should, from time to time, submit recommendations to the Governor and the General Assembly and to each institution of higher learning of its findings together with recommended plans for implementing such recommendations. The State Commission should adopt uniform definitions and forms in such matters as financial reporting, academic statistics, and resident status of students for use in making financial recommendations to be followed by the institutions of higher learning.
- H. Assume responsibility for continuous master planning and conduct or cause to be made such studies, surveys, and evaluations of higher education as it believes necessary to carry out its duties. These studies should include, but not be limited to, studies of space utilization and development of guidelines for space utilization; studies of manpower needs and their implications for program development; studies of programs for purposes of identifying and reducing unnecessary program duplication and identifying needs for new programs; analyses of class size, faculty loads, and costs of instruction; sabbatical leave and other fringe benefits; analyses of enrollments; extension programs; sources of students and retention of students; and advise institutions on plans and needed improvements.
- I. Review all proposed bond issues to be made by any public institution of higher learning and to advise the Boards of Trustees of the respective institutions as to the economic feasibility thereof as set forth in House Bill Number 328, Act 242, as enacted by the General Assembly of the State of Arkansas, June 17, 1965.

- J. Serve as the State agency for the purpose of participating in the grant program under Title I of the Higher Education Facilities Act of 1963 of the Congress of the United States of America as empowered by Act 16 of the 1964 Special Session of the General Assembly of the State of Arkansas; and further, that the Commission shall serve as the State agency for all other Federal programs in higher education appropriate to its responsibilities. The Commission should be empowered to receive, hold in trust, expend and administer funds and other aid made available by the Federal Government and other agencies, public and private.
 - K. Continue to act as the "State Community Junior College Board" as set forth in Senate Bill 190, Act 404, of the 1967 Regular Session of the General Assembly of the State of Arkansas.
7. The proposed new Commission on Higher Education should be adequately staffed to meet the responsibilities assigned to it.
 - A. In order to attract a highly qualified staff, salaries should be comparable to similar positions in other states.
 - B. The central office staff of the new Commission should be administered by a director appointed by the State Commission. The Commission should have the right to set the salaries and working conditions of the professional staff.
 - C. The professional qualifications and salary of the director and staff should be comparable to those in universities.
 - D. The new Commission should be provided sufficient operating funds to enable it to carry out adequately the roles and functions assigned to Commission.
 8. The Commission will establish such advisory committees and councils, including a president's committee, as it deems necessary for the effective coordination of higher education in the State.
 9. The Commission should encourage the cooperation of private institutions in its efforts to plan more effectively for the coordinated development of higher education.

Recommendations on Institutional Roles and Functions:

1. It is recommended that the public higher educational system in Arkansas incorporate the following elements:
 - A. A statewide system of public comprehensive community junior colleges offering higher educational opportunities (vocational, technical, continuing education, and college transfer) of two years or less duration, and desirably distributed as widely as possible. These institutions should be developed as rapidly as the State's financial resources will permit.
 - B. A core of institutions with emphasis on undergraduate degree programs and master's degree programs in a limited number of fields.
 - C. A core of institutions with emphasis on undergraduate degree programs and more extensive offerings at the master's degree level.
 - D. A residential university with broad undergraduate and master's degree programs and limited doctoral programs.
 - E. An urban-oriented university offering work at the upper and graduate and professional levels located

in the Little Rock metropolitan area, serving primarily commuting students. The offerings of this institution should include an extensive evening program, broad upper level baccalaureate and master's degree curricula, and doctoral and professional programs appropriate to the growth needs of an urban area.

- F. A comprehensive university, primarily of a residential nature, with broad offerings at the undergraduate, master's and doctoral levels, with a number of professional schools giving increased emphasis to graduate and professional study and research.

- 2. Arkansas Agricultural Mechanical and Normal College, Arkansas Agricultural and Mechanical College, Arkansas Polytechnic College, and Southern State College shall comprise the core of institutions with emphasis on undergraduate degree programs and limited number of master's degree programs in related fields.

Due to the historical background in enrollments and programs in the core of institutions (Arkansas, Agricultural, Mechanical and Normal College, Arkansas Agricultural and Mechanical College, Arkansas Polytechnic College, and Southern State College) which should emphasize undergraduate programs and master's degree programs in a limited number of fields, these institutions have not achieved a growth pattern comparable to other institutions in the State; therefore, it is felt that the following general recommendations should apply to this group of institutions.

- A. In the immediate future the first efforts of these institutions should be to strengthen and expand their presently authorized undergraduate degree programs with primary emphasis being on strengthening programs at the upper level.
- B. Master's degree programs should be authorized only in specific area where the need is clearly evident and upper level production of a program would indicate that a quality program could be offered.
- C. When comprehensive public junior colleges are eventually located in areas served by those colleges, programs of less than baccalaureate level shall be minimized or completely transferred to the junior colleges as rapidly as possible.
- D. These colleges should give attention to their community service responsibilities, especially in areas related to cultural development and enhancement of the localities surrounding the colleges.
- E. Consideration should be given to changing the names of institutions where their roles and functions have changed since their establishment.

- 3. Henderson State College and The State College of Arkansas should comprise the core of institutions with emphasis on undergraduate programs and extensive offerings at the master's degree level.

Henderson State College and The State College of Arkansas, which comprise the core of institutions which should place major emphasis on undergraduate programs and extensive offerings at the master's degree level have been offering Master of Science programs in Education for a number of years. This degree concerns itself primarily with subject matter specifically for teachers; and as a result subject matter areas in Science, Liberal Arts, and Business, where this specialization has occurred, are now relatively strong programs and should be the areas first suited for master's degree work. In view of this, it is felt that the following general recommendations should apply to these institutions.

- A. In the immediate future major emphasis should be placed on bringing all undergraduate programs to a level of high quality and on strengthening the present master's level programs.
- B. Additional master's degree programs should be authorized in instances where need can be

demonstrated and where the proposed programs conform to the criteria established by the Commission on Coordination of Higher Educational Finance.

- C. When comprehensive public junior colleges are eventually located in areas served by those colleges, programs of less than baccalaureate level shall be minimized or completely transferred to the junior colleges as rapidly as possible.
 - D. Specialist degree programs, professional schools such as Law, Medicine, Engineering and similar programs should not be offered by these institutions.
 - E. These colleges should give attention to their community service responsibilities, especially in areas related to cultural development and enhancement of the localities surrounding the colleges.
 - F. These institutions should be encouraged to establish cooperative master's and doctoral programs with other public institutions in the State.
4. Arkansas State University should be assigned the role of a residential university with broad undergraduate and master's degree programs and limited doctoral programs established in conformity with the criteria established by the Commission on Coordination of Higher Educational Finance.
5. An urban-oriented university offering work at the upper and graduate and professional levels located in the Little Rock metropolitan area and serving primarily commuting students, should be provided through a merger of the University of Arkansas and Little Rock University. The University of Arkansas at Little Rock should offer an extensive evening program, broad upper level baccalaureate and master's degree curricula, and doctoral programs appropriate to the growth needs of an urban university. New programs at all levels should be approved only when they meet the criteria established for such programs by the Commission. However, it is recommended that:
- A. Approval for the establishing of an urban-oriented university offering programs and services at the junior, senior, graduate, and professional levels should be contingent upon the establishment of a comprehensive community junior college in Pulaski County. The junior college should be approved under the policies of Act 404 of 1967 and the guidelines of the Commission on Coordination of Higher Educational Finance.
 - B. The new institution should be known as the University of Arkansas at Little Rock.
 - C. The Industrial Research and Extension Center, Graduate Institute of Technology, Graduate School of Social Studies, and the School of Law, all located in Little Rock and administered by the University of Arkansas, should be combined with the new institution.
 - D. The new institution should be administered by the Board of Trustees of the University of Arkansas, and the chief administrator of the new institution should be directly responsible to the President of the University of Arkansas.
 - E. The University of Arkansas at Little Rock should offer an extensive evening program, broad upper level baccalaureate and master's degree curricula, and doctoral and professional programs appropriate to the growth needs of an urban university.
 - F. New programs at all levels should be approved only when they meet the criteria established for such programs.
 - G. No action should be taken to implement any of these recommendations until additional funding for the operation and capital needs of the present State supported institutions and agencies of higher

education as well as funding for the new venture is assured.

6. The University of Arkansas shall be designated as a comprehensive university primarily of a residential nature with broad offerings at the undergraduate, master's, and doctoral levels, and with a number of professional schools; and it should continue to serve as both the Land-Grant and general-purpose university of the State.
7. It is recommended that a statewide system of public comprehensive junior colleges offering higher educational opportunities (vocational, technical, continuing education, and college transfer credit) of two years or less duration, and desirably distributed as widely as possible, be developed as rapidly as the State's financial resources will permit; and that the Report of the Committee on Junior College and Vocational-Technical Programs of the Statewide Study of Higher Education be used as a guide by the Commission in developing the statewide system of public comprehensive community junior colleges.

Recommendations on Finance:

1. The Commission on Coordination of Higher Education Finance should continue to serve as the agency responsible for coordinating the financial operations of the public institutions of higher learning in the State.
2. If Arkansas hopes to maintain even its present position among other states in the field of higher education, the minimum financial support for operational expenditures should be the expenditures projected in current dollars values by the Committee on Finance (these expenditures have been summarized in tabular form in this chapter).
3. It is felt that Arkansas has the potential to improve its relative position among other states in regard to most criteria used in evaluating a states' higher educational programs and services. If this improvement is to be realized, the support for operational expenditures should approximate the expenditures projected in inflated dollars by the Committee on Finance.
4. Since no State funds were made available for capital improvements at the various State supported institutions of higher learning for the 1967-69 biennium, the building programs at most of these institutions have suffered materially. In fact facility needs in some instances have reached or exceeded the critical point. If adequate State funds are not provided immediately to remedy this situation, the total higher education endeavor in the State may suffer irreparable damage. Therefore the State should consider as a minimum the expenditures for capital improvements that have been tentatively agreed upon by the Finance Committee and the Director of Higher Educational Facilities Study (these expenditures are discussed in the report of the Finance Committee and the Facilities Study recommendations will be available in the near future).
5. All interested State agencies including the Commission on Coordination of Higher Educational Finance, State Department of Administration, Legislative Audit Division, Legislative Council, and Arkansas Association of College and University Business Officers should work together to develop adequate definitions and instructions to supplement recommendations of **College and University Business Management** and to insure a uniform chart of accounts.
6. An adequate and acceptable object code should be developed and adopted by all State agencies. Agencies should be permitted to enlarge codes as necessary for management information, but all reporting should conform exactly to the adopted code.

7. Adequate resources should be made available to develop a comprehensive management information system for higher education in the State which would be a fully computerized system utilizing the most advances techniques in operations research and systems analysis.

CHAPTER II

INTRODUCTION

The accelerated rate of change in Arkansas since World War II has focused new emphasis upon every level of education. For generations, the State's agricultural economy and rural society required a labor force that had only limited educational opportunities and accomplishments. Dedication to hard work and an unshakeable faith in the future served the majority of her forefathers well in their struggle for success during the period when a college degree was a rarity.

The transformation that has come to Arkansas in the past few years is startling. Agriculture is now scientifically oriented and requires skilled personnel in most of its operations. Unskilled or semi-skilled laborers, who for years constituted an important economic element in the State, today find vocational opportunities limited more and more each year. The trends toward industrial development are destined to increase during the decade ahead. As these trends continue, better education will become the critical ingredient of accomplishment for the individual and the State. The challenges of technologies, such as the space sciences, require developing the unlimited potential of the human and physical resources of the State and producing a system of higher education which will challenge every Arkansan to develop his technical, vocational, or academic talents to the fullest.

The next decade will bring many problems of considerable magnitude and complexity. New and different forms of technology will replace those familiar to the State. Change, which will permeate every aspect of its society, looms vividly on the horizon. In the light of such challenge, it is imperative that Arkansas and Arkansans take a good hard look at their programs of higher education.

The citizens of Arkansas, like those in every other state, want to develop their social and economic strength to the fullest possible extent. In accomplishing this purpose higher education has a vital role, for the colleges and universities are the centers for developing the most precious resource of all—the capability of the individual. That resource when fully utilized generates within a state the ability to use other resources most completely; but without trained manpower and an educated citizenry natural, geographic, and related resources cannot be fully exploited to a state's benefit.

Knowing this, the General Assembly of the State of Arkansas in its 1967 Regular Session passed an Act requiring that a comprehensive study of higher education be made by the Arkansas Commission on Coordination of Higher Educational Finance. Act 490 of the Regular Session of 1967, entitled, "An Act to make an appropriation to the Commission on Coordination of Higher Educational Finance for the purpose of making a comprehensive study of the higher educational needs of this State and to report the findings and recommendations resulting therefrom to the Sixty-Seventh General Assembly; and for other purposes," states in Section 4: "It is hereby found and determined by the General Assembly that there has been a significant increase in enrollment in the State supported institutions of higher learning in this State; that estimates of future enrollment anticipate further significant increases in enrollment at the respective institutions; that the development of a comprehensive plan for the future growth and expansion of the higher educational opportunities of this State is essential if the State is to make maximum utilization of its limited resources in providing the best possible higher educational opportunities for the citizens of this State; and, that the immediate passage of this Act is necessary in order that a broad and comprehensive study might be immediately undertaken for the purpose of developing recommendations to be completed for consideration prior to the time of convening of the 1969 session of the General Assembly. Therefore, an emergency is hereby declared to exist and this Act being necessary for the immediate preservation of the public peace, health, and safety shall be in full force and effect from and after its passage and approval."

Act 490, of course, applied only to public institutions. In order for the study to be statewide, and, therefore, more useful, the Commission on Coordination of Higher Educational Finance invited all other colleges

and universities in the State to participate. The response to this invitation to the Presidents was unanimously favorable.

The staff of the Commission on Coordination of Higher Educational Finance began compiling data for the study soon after the Act was approved on April 4, 1967.

Individual institutions of higher learning, working with the Commission staff, conducted their own institutional role and scope studies and presented them to the Commission in the summer of 1967. These studies were later updated by the institutions and resubmitted to the Commission during the fall of 1967.

In August, 1967, the Commission on Coordination of Higher Educational Finance appointed a full-time director and three general consultants, serving on a part-time basis, to work with the Commission and the institutions of higher learning in developing a comprehensive plan for higher education in Arkansas.

As part of this study, as reported by the Commission to the 1967 Regular Session of the General Assembly, a study in depth would be made of the higher educational needs of Central Arkansas. Due to a proposal by the Governing Boards of the University of Arkansas and Little Rock University concerning a merger of the two institutions, the Legislative Council requested information from the Commission on Coordination of Higher Educational Finance on the proposed merger and other alternatives for meeting the higher educational needs of Central Arkansas. The Legislative Council filed three proposals (Numbers 16, 19, and 37) and one resolution (Number One) concerning the merger and other alternatives. (Appendix I).

In response to the proposals and resolution of the Legislative Council, the staff of the Commission on Coordination of Higher Educational Finance conducted a study of the proposed merger and other alternatives for meeting the higher educational needs of Central Arkansas. This study was done out of context with the planned development of the overall study, and without the advice and assistance of the consultants for the State study.

The Commission's study on the proposed merger was presented to the Legislative Council on December 15, 1967. The recommendations of this study were not presented to the 1968 Special Session of the Legislature as had been proposed by supporters of the merger. However, the 1968 Special Session of the Legislature did pass House Concurrent Resolution Number Two which directed the Commission on Coordination of Higher Educational Finance to:

"BE IT RESOLVED that the Commission on Coordination of Higher Educational Finance be and is hereby requested to prepare estimates of financial needs and requirements of each of the existing State supported institutions of higher learning for each year of the 1969-71 fiscal biennium; and, in addition thereto, shall prepare estimates of plans, programs, and budgets that would be required and desirable if (a) the General Assembly were to enact legislation providing for a merger of Little Rock University and the University of Arkansas, or (b) the General Assembly were to establish in the Central Arkansas area a new institution of higher learning with adequate acreage for future expansion, including estimates and recommendations for the minimum acreage requirements and construction costs for such facility. In preparing estimates of land, programs, and budgets for meeting the higher educational needs of Central Arkansas, the Commission shall specifically make projections which will reflect the most desirable long-range plan for meeting such higher educational needs in Central Arkansas.

BE IT FURTHER RESOLVED that the request herein for the preparation of estimates for plans, programs, and budgets for meeting the higher educational needs in Central Arkansas is for information purposes only, to be used in guiding the General Assembly, at the 1969 regular session and in the future, in its consideration of this problem, and shall not be deemed an endorsement or commitment by the General Assembly of any proposal for meeting the higher educational needs of Central Arkansas."

Therefore, the proposed merger has undergone further study and is being included as a part of this report.

ORGANIZATION AND PLAN OF THE STUDY:

The general design and organization of the Comprehensive Study of Higher Education in Arkansas was developed by the study director working in cooperation with the consultants, the Commission staff, and the leadership in higher education in Arkansas. The overall direction of the study was vested in a Coordinating Committee made up of the Chairmen of the various technical committees. (A list of members of each of the advisory and technical committees is presented in Appendix II.)

The study was conducted in four phases. Phase I saw all institutions conducting their individual role and scope studies.

Phase II saw all institutions working together as a statewide interest group and as seven special technical committees made up of personnel actively engaged in Arkansas higher education. In this phase, the present status and projected future needs of Arkansas for all types of post-high school education and related research and community services were assessed. Further, the roles of service in higher education to be performed by different types of higher educational institutions and programs were formulated. The special technical committees, therefore, dealt with (a) programs typically of two years duration, (b) programs typically of four-year duration, (c) graduate and professional programs, (d) extension, continuing and off-campus programs, (e) student aid programs, (f) libraries, and (g) finance.

In addition to the areas studied by the seven technical committees, intensive study and discussion of statewide coordination of all programs were conducted by the President's Committee, the Coordinating Committee, the study director and consultants, the members of the Commission on Coordination of Higher Educational Finance, and by the staff of the Commission.

Phase III saw the consultants, study director, Coordinating Committee, President's Committee, and the Commission on Coordination of Higher Educational Finance and its staff working together in producing the final report and recommendations for the Comprehensive Study of Higher Education in Arkansas.

This report, or Phase III of the study, relates the results of each of the first two phases and formulates role and scope programs for each type of higher educational institution in Arkansas. The consultants and members of the Coordinating Committee feel that this report fulfills in general the directives of Act 490 of the 1967 Regular Session of the General Assembly of the State of Arkansas; Proposals Numbers 16, 19, and 37; and Resolutions Numbers 1, 2, 9, and 20. To assist in this phase, the help of special consultants was obtained (a list of the names and titles of the special consultants is included in Appendix II).

Phase IV should see the Commission on Coordination of Higher Educational Finance, the institutions of higher learning, citizens of the State, the Governor, and the Legislature working cooperatively to implement the recommendations of the study.

CHAPTER III

DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS

The extent of the need for education beyond the high school and the kinds of post-high school educational programs that a state should provide depend, to a marked degree, on the nature of the social, cultural, economic, and political forces at play. Arkansas is no different from other states in this respect.

Material presented in this chapter represents a general review of the National, Regional, State, and Local socio-economic factors which may provide some important considerations to keep in mind in the development of a comprehensive plan for higher education in Arkansas.*

POPULATION CHARACTERISTICS:

From an analysis of the most reliable sources of information about population trends on the National scene, the following may reasonably be expected.¹

National Scene:

1. Nationally, the population growth will continue to be very substantial.
2. One of the most striking features of population growth will be in the increase in the proportion of the population below the age of 20 and over the age of 65.
3. The productive age group (age 20-65) will increase in numbers but decline as a percentage of the total population.
4. The projected rapid growth of the older population will require attention to the services basic to their needs, while educational demands also increase.
5. Women will play an increasingly important role in the labor force.
6. Present patterns of population on movement, characterized by great mobility and a general shift from rural to urban areas, will continue, perhaps at an increased rate.

Arkansas Scene:

A population analysis on the Arkansas scene shows the following past, present, and future trends.

Past: The decennial censuses reflect steady population increases for Arkansas from the 1890 count of 1,128,211 to the 1940 figure of 1,949,387. Population losses were recorded in the next two census counts. From 1940 to 1950 there was a net population decrease of 39,876 or two per cent. The net loss of the 1950-1960 decade was even larger—123,239 or 6.5 per cent of the 1950 population of 1,909,511. The 1960 census count was 1,786,272.²

*Much of the data in this chapter has been taken from studies conducted by the staff of the Industrial Research and Extension Center of the University of Arkansas for their own use, or for use by other agencies, and is reproduced here with the categorical permission of Dr. Barton A. Westerlund, Director, Industrial Research and Extension Center. Credit is, however, given in the numbered bibliography to each individual and agency whose material has been used.

Present: An indication of Arkansas' recent economic development is that the State is once again experiencing population growth. According to annual intercensal population estimates prepared by both the United States Bureau of the Census and the University of Arkansas' Bureau of Business and Economic Research, the reversal of the State's declining population experience occurred sometime during the 1956-1958 period. From a low of about 1,770,000 for this period, Arkansas' population had grown by 1963 to around 1,860,000 reflecting an absolute change of 90,000 persons or a relative increment of five percent. In contrast to the 1940-1960 experience, intercensal population estimates of the United States Bureau of the Census show a 1960 to 1966 growth rate for Arkansas' population that closely approximates those for the United States and its Southern Region. These growth rates were 9.3, 10.6, and 9.5 per cent respectively.³

Future: A continuation of the trend of an increasing State population is reflected in the 1980 projections prepared for the Arkansas Planning Commission by the Industrial Research and Extension Center. The projected range for 1980 is from a low of 2,268,000 (Series A) to a high of 2,455,000 (Series B). (See Appendix III.) If the State's current rate of growth were to prevail to 1980, the actual population total would fall between the two series. The only differences in the assumptions underlying the two projections are those with respect to migration. In the Series A projections, it was assumed that migration would be one-half of that experienced by the State during the 1950-1960 decade. In the Series B projections no net migration was assumed. The Series A projections reflect a rate of population growth below that experienced by the State over the past five or six years. However, the Series B projections are above the current rate of growth, and since no migration is assumed, effectively demonstrate future employment needs if Arkansas is to retain its young people.⁴

What history will record as the actual figure for 1980 will depend a great deal upon Arkansas' economic growth in the future since it is believed that most people migrate to other states as a result either of the lack of job opportunities in their state of residence, or because of the existence of higher paying jobs in other states.⁵

Urbanization:

As of the 1960 census, Arkansas was much more "rural" than was the United States. Rural, in this sense, means living on a farm or living in a community of less than 2,500 population. Forty-seven per cent of Arkansas' 1960 population was rural; in the United States only 30 per cent of the population was rural.⁶

The rate of urban growth in Arkansas has been substantially greater over the past 20 years than in the country as a whole. In the future Arkansas will become more urban, but will probably stay below the United States average since agriculture will continue to be relatively more significant to its economic picture.⁷

The increased urbanization occurring in Arkansas is a part of a larger National trend. It is estimated that since 1950, 85 per cent of the population growth in this country has taken place in 192 standard metropolitan statistical areas. Similarly, in Arkansas the trends towards urbanization are shown by the fact that in 1930 the State's urban population was 21 per cent; and in 1940 it was still only 22 per cent, but by 1950 it had jumped to 33 per cent, and by 1960 to 43 per cent. Nevertheless, the rural population still accounted for 57 per cent of the population in 1960; so the State is still recognized as an agricultural area.

The significant point, however, is the rate by which urbanization is increasing in Arkansas. Furthermore, for the first time in the State's history urbanization has proceeded to the point where today there are 10 counties in Arkansas which are over 50 per cent urbanized. In total, these counties represented more than 36 per cent of the State's population in 1960. And, according to population estimates as of July 1, 1966, more than 30 per cent of the State's total population was concentrated in five metropolitan areas—Little Rock, North Little Rock, Fort Smith, Pine Bluff, West Memphis, and Texarkana.⁸

TABLE II
POPULATION GROWTH OF ARKANSAS COMPARED TO
UNITED STATES AND REGIONS OF ARKANSAS COMPARED TO THE STATE

Urban Growth Rates⁹

Period	Arkansas	United States
	(Per cent)	
1930 to 1940	12.8	7.9
1940 to 1950	46.0	20.6
1950 to 1960	21.4	29.9

Population: Total, Urban and Rural, and per cent distribution by regions:

Arkansas, 1960 ¹⁰						
Region	Total Population		Urban		Rural	
	Number	Per cent of State Total	Number	Per cent of Region	Number	Per cent of Region
North	204,692	11.4	56,439	27.6	148,253	72.4
East	444,094	24.9	147,568	33.2	296,526	66.8
Central	686,077	38.4	357,923	52.2	328,154	47.8
West	133,451	7.5	69,863	52.4	63,588	47.6
South	317,958	17.8	133,510	42.0	184,448	58.0
State Total	1,786,272	100.0	765,303	42.8	1,020,969 ^a	57.2

^a Rural farm population was 331,645 in 1960.

Age:

Arkansas' population is clustered somewhat more in the younger and older age groups than in the country as a whole. In 1960, 40.3 per cent of Arkansas' population was under 20 years of age; the comparable United States figure was 38.5 per cent. This same census showed that 10.9 per cent of Arkansas' population was 65 years of age or older; the comparable United States figure was 9.2 per cent.¹¹

The per cent distribution figures on the young and old mean that Arkansas has a smaller proportion of its population in the prime working age group (20-64)—48.8 per cent compared with the National average of 52.3 per cent.¹²

While the age group of (20-64) will fall in relative importance to the total population, it is predicted that the actual count of people of these ages will rise by 1980. The greater part of the increase within the age group (20-64) will occur in the age bracket 20-34. This age bracket includes people who are now of school age. These projections dramatically reflect the effect of economic factors upon potential migration and the fact that the younger part of the prime working age group is extremely mobile.¹³

Color:

Whites accounted for 78.1 per cent (1,395,703) and nonwhites 21.9 per cent (390,569) of Arkansas' population in 1960. By comparison the distribution for the United States was white, 88.6 per cent and nonwhite, 11.4 per cent.

The whites' proportionate 1960 share of 78.1 per cent was an increase over the 1950 proportion of 77.6 per cent. Both Series A and B projections reflect a decline in the white proportion of Arkansas' population by 1980—Series A, 76.4 per cent and Series B, 74.1 per cent.¹⁴

Sex:

The 1960 white sex distribution was 49.5 per cent male and 50.5 per cent female. Through the 1950 tabulation, males had accounted for 50.0 per cent of Arkansas' white population. The 1960 nonwhite sex distribution was 48.2 per cent male and 51.8 per cent female. The count of nonwhite females has exceeded the count of nonwhite males beginning with 1930.¹⁵

It is believed that the sex distribution of the 1980 population will change little from the 1960 proportions of 49.2 per cent male and 50.8 per cent female. Some absolute increase in numbers of females relative to males is expected in the older age groups because of the longer life expectancy of the female.¹⁶

For those who wish to pursue the population picture in detail, Table I in Appendix III contains data reflecting the 1960 actual population count and the 1980 projected population figures for Arkansas by age, sex, and color.¹⁷

Density:

Arkansas has a lower population density per square mile than any of its neighboring states, with the exception of Oklahoma. In 1960 the density was 34.0 persons per square mile, while the range in neighboring states was from 33.8 in Oklahoma to 85.4 in Tennessee. Of course, the density within the State varies considerably, with the lowest in the North (21.2 persons per square mile) and the highest in the East (44.8 persons per square mile).¹⁸

Migration:

Arkansas has experienced net out-migration at least since the turn of the century to the present. Although Arkansas' natural increase has been greater than for the Nation as a whole, the State has lost population because of migration. The amount of net migration was only slightly higher in the 1950's than in the 1940's. This emigration pattern was true for whites and nonwhites, although the rate of nonwhite migration was almost twice that of the white.¹⁹

The estimated net migration by color for the period 1955-1960 based on a 25 per cent sample is shown below.²⁰

	Number	Net Migration as a Per cent of 1960 Population ²¹
Total	-66,042	-4.2
White	-40,982	-3.3
Nonwhite	-25,060	-7.6

Per cent based on population five years old and over reporting on 1955 residence. Data shown in United States Department of Commerce, Bureau of the Census, Census of Population, 1960: Mobility for States and State Economic Areas, Final Report PC(2)-2B (Washington: Government Printing Office, 1963), p. 160.

Between 1955 and 1960, the group that constituted the greatest percentage of out-migrants was 15 through 24 years of age. As shown in Table III the proportion of migrants in this age group was greater than the proportion of total population in the same age group.²²

Most migrants from Arkansas were from rural areas. It was estimated that in 1960 Arkansas' net emigration rate was 27.6 per cent for the rural population and 2.8 per cent for the urban population. This type of migration is not unusual since every predominantly agricultural area has experienced such losses as a result of the introduction of more farm machinery. As mechanization reaches its optimum level, the rural population is expected to stabilize.²³

Of course, Arkansans have also migrated because of job opportunities. The Nation's employment opportunities will vary according to business conditions. Where prosperity is high, there is a surge of out-migration. The reverse is true when National business conditions are uncertain.²⁴

TABLE III
AGE DISTRIBUTION OF POPULATION AND MIGRANTS
ARKANSAS, 1960²⁵

Age Group	Per cent of 1960 Population Five Years and Over	Per cent of 1955-1960 Out-migrants
5 to 14	23.6	22.9
15 to 24	15.8	30.3
25 to 34	11.9	19.9
35 to 44	13.1	11.1
45 to 54	13.0	7.6
55 to 64	10.4	4.5
65 and over	<u>12.2</u>	<u>3.7</u>
Total, five years and over	100.0	100.0

Sources: Compiled from United States Department of Commerce, Bureau of the Census, Census of Population, 1960: Mobility for States and State Economic Areas, Final Report PC(2)-2B, p. 143; and Census of Population, 1960: General Population Characteristics, Arkansas, PC(1)-5B, pp. 5-36 (Washington: Government Printing Office).

EMPLOYMENT PATTERNS:

On the National scene, long-time students of employment trends and patterns in the United States are confident of the following employment predictions.²⁶

National Scene:

1. It is estimated that three million new jobs will have to be created annually.
2. Achieving full employment of the rapidly growing labor force will involve large employment gains in many nonfarm industries, especially since farm employment is expected to continue to decrease.
3. Professional and technical occupations, it is predicted, will be the fastest growing during the 1960's; but above average employment growth is expected also in other white collar occupations, in occupations requiring skilled workers, and in the service occupations.
4. Unemployment is highest among unskilled workers with low educational attainment; and the prediction is that despite the very substantial projected increase in employment opportunities, there will be no increase in unskilled jobs. (Figure I).
5. Occupational skill requirements will continue to change and to rise as industrial and occupational changes occur. As change is continuous, so must learning on the part of the worker be lifelong.
6. Government, business, industry, and the professions will look more toward the graduate schools of the Nation to fill their needs for highly educated manpower.

Arkansas Scene:*

In May, 1964, Forrest H. Pollard and Ethel B. Jones published a study in which they analyzed the employment situation in Arkansas and projected to 1980 the employment picture for the State. The findings of this study were reported as follows: 127

"Two classifications used in studying the employment situation of a geographic area are by industry and by occupation. Industries are classified according to the product or service produced by the workers. Examples are agriculture, manufacturing, wholesale trade, and retail trade. Occupation classifications are made according to the type of activity performed by the worker. Examples are professional workers, managerial workers, craftsmen, and laborers. It is generally felt that the industry structure of a geographic region leads to determining the occupational structure of that area.

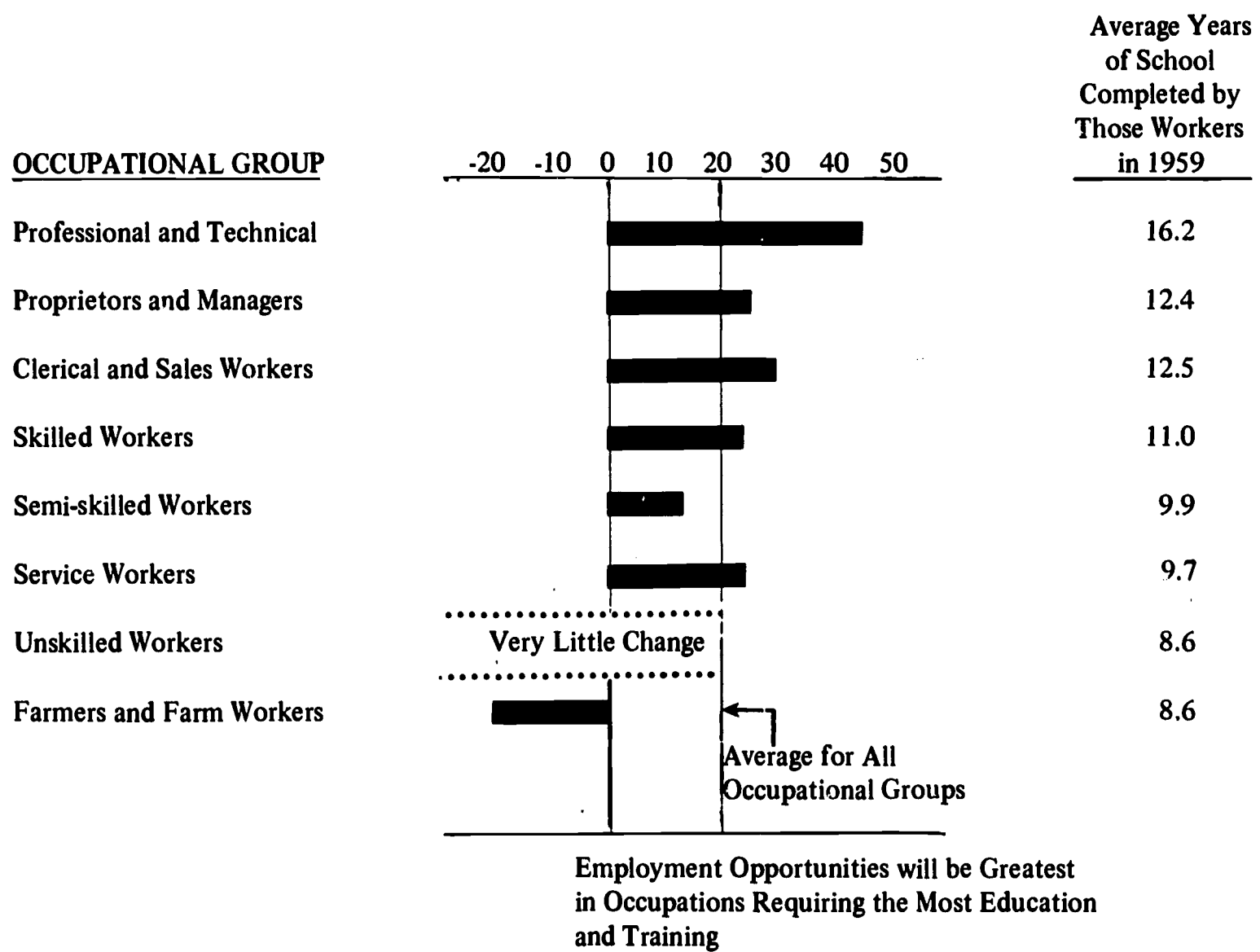
However, it is certainly possible that the supply of people in particular occupations influences the type of industrial growth in an area. For example, by the Federal Government's Standard Industrial Classification there are 21 major industry classifications within the general heading of manufacturing.

Industry Employment, Present and Past: Tables IV and V in Appendix III provide information on industrial employment in Arkansas and the United States for the period 1940-1960. Certainly the most dramatic change of this 20-year period was the decline of agriculture as an employer of Arkansas' people.

In 1940, 52 out of every 100 Arkansans drew their livelihood from agriculture. By 1960, this figure had fallen to 18 out of every 100. Others large changes were the dramatic increases in manufacturing (from 10 to 20 of every 100 employed workers), wholesale and retail trade (from

*The material appearing in this section of the report has been taken verbatim from a study done by Forrest H. Pollard and Ethel B. Jones for the Industrial Research and Extension Center of the University of Arkansas. Permission to reproduce the data in this form was granted by Dr. Barton A. Westerlund, Director, Industrial Research and Extension Center. The data was reviewed and approved by Dr. Westerlund.

FIGURE I
PER CENT CHANGE IN EMPLOYMENT
(in the United States)
ESTIMATED FOR THE DECADE 1960-1970¹



¹Adapted from: U. S. Department of Labor, Manpower: Challenge of the 1960's.

11 to 18), and services (from 12 to 17).^{*} These dramatic changes have brought the industrial employment picture for the State closer to the National scene (Table VI). However, it is obvious from Table VI that Arkansas still has a smaller proportion of its employment in manufacturing (Arkansas, 20 out of every 100 workers; the United States, 27 out of every 100 workers); and a larger proportion in agriculture (Arkansas, 18 out of every 100 workers; the United States, 7 out of every 100 workers).

Also, within the general heading of manufacturing, Arkansas' structure is significantly different from that of the United States. The top six manufacturing employing industries in the United States are the food and kindred products industries and those industries which produce metal products (transportation equipment; machinery, except electrical; electrical machinery; fabricated metals; and primary metals). Together these six industries employ 52.6 per cent of all manufacturing workers. The five metalworking industries alone account for 42.2 per cent of all manufacturing workers in the United States. In contrast, in Arkansas the above list of metal industries accounts for only 13.5 per cent of manufacturing employment. Arkansas' top manufacturing employing industries are lumber and wood products; food and kindred products; apparel; paper and allied products; furniture and fixtures; and printing, publishing, and allied products. These six industries employ almost two-thirds of Arkansas' manufacturing workers.

Occupation Employment, Present and Past: Looking next at the occupation distribution (Tables VII and VIII in Appendix III), the decline in agriculture has also brought about drastic changes in the pattern of employment by occupation in Arkansas. In 1940, 51 out of every 100 employed Arkansans worked as farmers, farm managers, or farm laborers. In 1960, the comparable figure was 16 out of every 100.^{**} Among other occupation, laborers have declined in relative importance in the total occupation distribution structure, while all other occupations of the major groupings shown in Tables VII and VIII have increased. Most noticeable is the fact that a larger number of employed Arkansans are now "operatives"—from seven out of every 100 in 1940 to 17 out of every 100 in 1960. This is in large part attributable to our growing manufacturing employment, although the term "operative" includes in large numbers, such diverse means of livelihood as auto parking and garage attendants, apprentices to the skilled trades, dressmakers and seamstresses not employed in a factory, laundry and dry cleaning, nonclerical workers, and any type of truck driver.

Over the 20-year period, 1940-1960, the three top growth occupations in terms of net increase in the number of jobs have been operatives (a net increase, 1940-1960, of 54,122 jobs), craftsmen (32,208), and clerical workers (27,857). These three were followed by professional; technical, and kindred workers (17,710); service workers (17,600); managerial workers (15,441); and sales workers (12,649).

For the occupation structure, too, the decline in agriculture and the growth in manufacturing have resulted in a structure for Arkansas that is more similar to the United States. The State is moving toward the National occupational distribution pattern in the farm, operative, managerial, sales, service, and craftsmen categories. Despite this movement, there still exists a noticeable difference from the National distribution for the craftsmen occupations as well as for the professional and clerical worker occupations.

^{*}The services industry category includes such diversified activities as household help, automotive and television repair, entertainment activities, legal and medical care, and religion.

^{**}The reader might wonder why these numbers are slightly different from the figures presented in Appendix III for the agriculture industry. The reason is that the industry "agriculture" includes, in addition to the occupation "farmers, farm managers, or farm laborers," a number of people in other occupations—for example, clerical workers on large commercial farms.

TABLE VI

EMPLOYMENT BY OCCUPATION, ARKANSAS AND THE UNITED STATES: 1940-1960

Occupation	Arkansas		United States	
	1940	1950	1940	1950
Professional, technical, and kindred workers	28,410	37,458	3,579,585	4,921,272
Managerial	34,803	47,105	3,633,656	5,036,808
Clerical	23,008	40,258	4,382,300	6,954,440
Sales workers	24,448	34,992	3,080,714	3,906,794
Craftsmen, foremen, and kindred workers	31,993	57,852	5,171,394	7,820,634
Operatives	42,786	79,081	8,079,922	11,180,315
Laborers (nonfarm)	43,832	46,056	3,142,888	3,436,110
Service workers ^a	51,713	52,515	5,291,594	5,708,178
Farmers, farm managers, and farm laborers	297,619	210,173	8,289,911	6,727,789
Occupation not reported	4,332	10,554	418,351	742,933
Total employed	582,944	616,044	45,070,315	56,435,273
				64,639,247

^aIncludes private household help.

Sources: U. S. Bureau of the Census, 1960 Census of Population, Vol. I, Part 5, p. 5-151 and Final Report PC(1) - 1C, p. 1-219. Additional information was also provided in a letter of February 24, 1964 from the U. S. Bureau of the Census.

Arkansas' Employment Pattern, 1980:

Two sets of employment projections by industry were prepared for the **State Plan Inventory**. Series I, the lower of the two projections, estimates that employment in the State will rise from the 1960 level of 565,491 to a level of 736,830 by 1980. This projection follows Arkansas' current industrial growth rates, but modifies these growth trends where appropriate. Series II, the higher of the two projections, estimates that employment in the State will rise from the 1960 level of 565,491 to a level of 811,870. The second set of projections represents an expectation for employment growth that will keep Arkansas' share of total National employment nearly the same in 1980 as in 1960. Table VIII in Appendix III presents the two projections by industry category together with the comparable data for 1960.

Since both projections lead to a somewhat similar distribution of employment of Arkansas workers among industries (the per cent distributions), it will suffice for the purpose of this presentation to discuss the Series I projection. However, as Series II indicates, it is now expected that the employment figures that history will record for 1980 will be significantly above the total of Series I.

By Industry: In terms of Series I, the largest increases will occur in manufacturing (89,257 workers), services (38,038), and wholesale and retail trade (31,880). Increases in other growth industries are in order of importance: government (21,615); finance, insurance, and real estate (17,184); and construction (6,396). Three industries—(1) agriculture; (2) mining, and (3) transportation, communications, and public utilities—are predicted by the Series I projection to employ fewer workers in 1980 than in 1960.

Within the broad industry grouping of manufacturing, the top six growth industries in terms of number of additional jobs will be, according to Series I, (1) electrical machinery (24,447); (2) apparel and finished products (10,891); (3) machinery, except electrical (9,500); (4) fabricated metals (9,446); miscellaneous manufacturing (8,665); and (6) food (8,163).*

By Occupation: The **State Plan Inventory** does not present occupation projections. However, it is possible to imply occupation employment estimates from the projections of employment by industry. In deriving occupation employment estimates in this manner, the basic assumption has been made that Arkansas will upgrade its occupation distribution by industry by 1980 to the pattern of the occupation distribution observed in 1960 for the United States as a whole. The 1980 Series I industry projections were used as the base for deriving the projected occupational groups. It should be noted, however, that Arkansas' future occupation needs would be even greater had the Series II employment projections been used as the basis for projecting occupation employment. Again, as was true in looking at the historical picture for Arkansas, only major occupation categories are considered. However, the categories should serve as enough of a guide for the reader to interpret the general types of education needs for the future. The observed occupation employment figures for 1960 and the implied occupation figures for 1980 from this projection are listed below.

Of course, the need for training new workers will exceed the differences between the projected employment figures for 1980 and those recorded for 1960 because a number of the workers employed in 1960 will move out of the labor force or die by 1980. No attempt has been made to estimate this "replacement" need. Similarly, not all of the increases will be filled by young people now in school. Currently employed workers can change their type of work or upgrade themselves

*The category "miscellaneous manufacturing" refers to such manufactured items as musical instruments, games and toys, sporting and athletic goods, buttons, brooms and brushes, mortician goods, and the production of sign and advertising displays.

within the occupation hierarchy. Also, part of the decline in the agricultural work force will be absorbed by movement of these people into other industries and, hence, other occupations.

<u>Occupation</u>	<u>1960 Employment*</u>	<u>Projected 1980 Employment</u>
Professional, technical and kindred workers	48,434	87,679
Managerial	52,870	64,934
Clerical	53,470	109,882
Sales workers	38,571	55,940
Craftsmen, foremen, and kindred workers	66,435	99,936
Operatives	101,506	136,305
Laborers (excluding farm)	40,212	39,968
Service workers	71,477	88,828
Farmers and farm workers	92,516	53,358
Total	565,491	736,830

How do these projected changes in employment by occupation from 1960 through 1980 compare with what has occurred over the past decade, 1950 through 1960? In other words, what do these projected changes imply for the changing emphasis on the types of training offered within education? To compare the 10-year period with the 20-year period, a 10-year rate must be approximated for the future by halving the 20-year growth figure. This method assumes that the absolute amount of employment increases will be equal between the decade 1960-1970 and the decade 1970-1980. There is no specific information for determining how close this assumption will fit the truth. Even so, the occupational growth comparisons have been compiled as shown below.

These figures show considerable increases in the level of demand for new professional, managerial, clerical, sales workers, and craftsmen. They show a continued increase, but somewhat less than over the past decade, in the for operatives and service workers. And, they show a continued but slowing decrease in job opportunities for laborers, farmers, and farm workers.

<u>Occupation</u>	<u>Actual Decade Change 1950-1960</u>	<u>Estimated per Decade Change, 1960-1980</u>
Professional, technical and kindred workers	10,239	19,623
Managerial	4,819	6,032
Clerical	12,811	28,206
Sales workers	2,840	8,685
Craftsmen, foremen, and kindred workers	7,911	16,751
Operatives	20,804	17,400
Laborers (excluding farm)	-6,607	-122
Service workers	17,881	8,676
Farmers and farm workers	-121,251	-19,579

*The numbers in this column are different from those shown in Table VI. The "occupation not reported" category in Table VI was distributed among the reported occupational categories according to the per cent that each reported category was of the total reported employed.

Information for Particular Counties and Cities of the State: As the future is discussed, the reader's interest naturally focuses on wanting to know what will be the picture for his own city or county. Unfortunately, while it is difficult enough to project what will happen for the entire United States, the job of projecting employment patterns becomes increasingly more difficult as the geographic area for which the projection is made becomes smaller. For example, while it is possible to make a reasonable prediction about Arkansas' manufacturing growth, it is difficult to know how many manufacturing plants and of what type will locate in a particular county in the next 20 years. Without this information, how many new jobs will be created in other industries as a result of rising income provided by manufacturing growth cannot be known.

Data about Arkansas' future at the State level becomes important to consider because of this lack of detailed knowledge about particular counties. Even if the detailed county data were available, the statewide situation would still provide a summary picture reasonably indicative of the trends in many different areas of the State.

Information Specific to the Young: The preceding discussion has been devoted to a consideration of the future industry and occupation structure of Arkansas' total 1980 labor force. Table IX shows that the persons in the 20-34-year age group will dominate the 1980 labor force. The people included in this age group in 1980 are presently enrolled as students in the schools of Arkansas. By either projection, the labor force of 1980 will depend much more heavily on the young than was the case in 1960. For this reason, every effort must be made to prepare today's students for those job opportunities which will exist in 1980."

TABLE IX
PERCENTAGE DISTRIBUTION OF THE LABOR FORCE BY AGE

	1960 Labor Force (Actual)	1980 Labor Force (Estimated)	
		Series A	Series B
Under 20	7.6	9.1	9.1
20-34	29.0	38.2	41.6
35-49	33.6	25.9	26.0
50-64	24.3	21.0	18.4
65 and over	5.5	5.8	4.9
Total	100.0	100.0	100.0

Sources: The 1960 distribution is computed from data shown on pages 5-307 of the United States Bureau of the Census publication, 1960 Census of Population, Characteristics of the Population: Arkansas, Vol. I, Part 5. The 1980 distributions are based upon labor force estimates derived from the population projections of the Arkansas State Planning Commission's State Plan Inventory. To make the labor force estimates, the 1960 United States labor force participation rates were applied against the population projections.

ECONOMIC GROWTH:

Total income in Arkansas had risen from \$564 million in 1929²⁸ to \$3,103 million by 1963²⁹ or there was a gain of 429 per cent during this period. The total personal income of the United States rose from \$86 billion in 1929 to \$462 billion in 1963 or a gain of 439 per cent.³⁰

Although Arkansas' total personal income rose from \$3,103 million by 1963, its share of the total income for the Nation declined slightly from 6.6 per cent in 1929 to 6.5 per cent in 1963.³¹

Following 1963 Arkansas' total personal income increased to \$3,938 million by 1966. A comparison of personal income from 1960 through the second quarter of 1967 is presented in Table X.³²

In the period 1959 through 1963 Arkansans increased their total personal income by 26.5 per cent. The major impetus to this increase was the increase in wages and salaries paid by industry. The total manufacturing industry payroll rose 36.7 per cent during this period while other business salaries and wages rose 30.1 per cent.³³

TABLE X
ARKANSAS PERSONAL INCOME*
MILLIONS OF DOLLARS, SEASONALLY ADJUSTED

Quarter	1960	1961	1962	1963	1964	1965	1966	1967
Jan-Mar	589	646	694	753	833	856	970	1,041
Apr-Jun	619	664	722	768	837	880	980	1,035
Jul-Sep	621	668	731	784	839	916	984	
Oct-Dec	630	723	751	798	865	929	1,004	
Annual	2,459	2,701	2,898	3,103	3,374	3,581	3,938	

*The 1960-66 values of personal income are those reported in the Survey of Current Business of April, 1967. The quarterly allocations of Arkansas annual totals for 1960-64 were made by the Bureau of Business and Economic Research. The estimates of Arkansas personal income in 1967 are based on a multiple regression of income on bank debits, retail sales, farm cash receipts, and wage and salary employment. The coefficient of multiple determination is .955, and the standard error of the estimate is \$10.42 million.

The total wages paid by all government units rose 29.7 per cent; farm income increased by only 9.8 per cent. All other income which included business and professional income, transfer payments, and non-business labor income, rose 26.5 per cent.³⁴

A comparison of sources of personal income shows that Arkansans are much more heavily dependent upon agriculture than is true for the Nation. Approximately 14.6 per cent of Arkansas' income during the period 1959 through 1963 was derived from agriculture, while Nationally only 3.5 per cent of our total personal income was obtained from agriculture. Manufacturing wages and salary incomes account for 15.5 per cent of Arkansas' total personal income and 21.8 per cent of the total personal income of the United States during the same period.

TABLE XI
PER CAPITA PERSONAL INCOME ESTIMATES, UNITED STATES
AND SUMMARY OF ARKANSAS REGIONS

Area	1950	1960	1965
United States	\$1,491	\$2,217	\$2,746
State of Arkansas	815	1,340	1,850
North Region	715	1,246	1,767
East Region	721	1,126	1,584
Central Region	917	1,496	2,058
West Region	925	1,446	2,057
South Region	777	1,262	1,713

Sources: Survey of Current Business and University of Arkansas, College of Business Administration, Bureau of Business and Economic Research.

Per capita income in Arkansas has historically been low as a result of her late emergence as an industrial state. In 1929 when the average per capita income in the United States was \$703, the per capita income in Arkansas was \$305 or 43 per cent of the National average.³⁶ In 1965 Arkansas' per capita income had increased to \$1,850 and the United States' to \$2,746.³⁷ A comparison of total and per capita income for Arkansas and the United States for the periods 1950, 1960, and 1965 is presented in Table XI.³⁸

According to an article appearing in the January 9, 1968, issue of the *Arkansas Gazette*, per capita income for 1966 showed a fantastic increase over the 1965 figure. The article states:³⁹

Per capita income in Arkansas rose an estimated 8.7 per cent in 1966, according to preliminary estimates made by Dr. Frank H. Troutman, Senior Industrial Specialist with the University of Arkansas' Industrial Research and Extension Center at Little Rock.

Dollar-wise, the increase was from \$1,866 to \$2,029. Total personal income for the State in 1966 was estimated at \$3,931,002,000, an increase of \$352,971,000.

"We simply have been growing at a pretty fantastic rate," Dr. Troutman said. This occurred despite a significant decline in farm wages, from \$75 to \$57 million, the result of increasing mechanization on the farms.

While farm wages dropped, the income of farm proprietors rose dramatically, from \$355 to \$440 million. Another big increase occurred in "transfer payment" income, such as retirement, from \$374 to \$419 million.

Total personal income in 1966 was up 9.9 per cent over the preceeding year, compared with a 5.7 per cent increase in 1965 over 1964.

Dr. Troutman anticipates not quite as good a year for 1967 with a further decline in farm wages contributing to a smaller growth rate.

Fluctuations occurred from county to county as major projects on the Arkansas and Ouachita Rivers were completed at one place and begun at another. Calhoun County, which has led the State in the percentage increase in per capita income from 1960 through 1966 with a 90.6 per cent increase, had a rise in per capita income from 1965 to 1966 of \$407 to \$1,731.

Declines Locate in Farm Areas

Most of the few dollar declines in personal income were in the heavily agricultural areas, where the number of farm workers has decreased as they have been displaced by machinery. Since most of them remain where they are, their joblessness is reflected in a decline of per capita income—a figure reached by dividing total personal income by population.

In some areas the decline could be attributed to the loss of a manufacturing plant. Dr. Troutman said this was the case in Hot Spring County as the result of the closing of a manufacturing plant at Malvern.

The County's per capita income dropped from \$1,919 to \$1,898. He said income reductions might also be the result of a natural increase in population.

Baxter County, one of the fastest-growing areas of the State economically, continued its rapid development pace with per capita income rising from \$2,155 to \$2,323. Not only has manufacturing employment continued to increase in Baxter; the influx of high income retired people, including many military people, continues to climb.

Pulaski, Sebastian Lead All Counties

Pulaski County, with a per capita income of \$2,888, up \$211 from the previous year, and Sebastian County (Fort Smith), close behind at \$2,799 (up \$189) continue to lead all Arkansas counties in this category.

Mississippi County, where per capita income at \$1,557 is only 22 per cent higher than in 1960, is at the bottom of the list in percentage increase for that period, with Carroll County only 0.4 per cent higher. The per capita income was \$18 less than the year before.

The average per capita increase from 1960 to 1966, statewide, was 47.5 per cent. For total personal income the increase was 59.9 per cent.

Other counties whose per capita income declined included Crittenden, from \$1,438 to \$1,428; and Hot Spring, from \$1,919 to \$1,898. Cleveland County was one of the big gainers, from \$1,170 to \$1,765, although its 1960-66 percentage gain was only an average of 50.9 per cent.

THE ARKANSAS RIVER REGION:

The Arkansas River Region is defined, in a study prepared for the Arkansas Planning Commission by Associated Planners, Inc., as follows:⁴⁰

"The State of Arkansas is divided into five geographic regions for planning purposes based on the preliminary 1980 State plan completed in 1965.* These Regions provide the framework within which more detailed planning studies can be made to provide answers to specific development problems for each of the regional areas.

The factors and criteria considered in delineating the Regions of the State were based on collaborative evaluations involving the Arkansas State Planning Commission, University of Arkansas Industrial Research and Extension Center, Department of Agricultural Economics and Rural Sociology of the University of Arkansas, and Associated Planners, Inc. Factors considered were (1) economic factors including markets, trade centers, transportation routes, employment, income, and location of industrial activities; (2) geographic factors including natural resources; watersheds; and land use patterns, such as location of timber, mountain areas, and agricultural areas; (3) social and cultural factors including population characteristics; and (4) political factors including county boundaries, places of governmental activities, areas of functional government jurisdiction, and factors of political cooperation.

In general, the Regions were defined on the basis of similarity of economic factors, natural resources, social and cultural factors, and political factors. However, in some of the Regions, market orientation was a dominating factor resulting in the determination of some regions containing many of the foregoing factors which were diverse in nature.

*These Regions are: Northern Region, Eastern Region, Western Region, Central Region, and Southern Region. The Arkansas River Region encompasses parts of the Western, Central and Eastern Regions.

The Arkansas River Region comprises 25 counties in Central and Western Arkansas located in the Arkansas River Valley from the Oklahoma border on the west to the confluence of the Arkansas and White Rivers in Southwest Arkansas. The land area comprises some 18,300 square miles and constitutes about one-third of the total land area in the State.

The Arkansas River Region includes three of the State's four metropolitan areas. The Little Rock-North Little Rock metropolitan area is the main Regional center serving the Arkansas River Valley and the remainder of the State as its governmental center. The Fort Smith metropolitan area is a manufacturing center, and the Pine Bluff metropolitan area is oriented to the agricultural economy in the delta. Other urban areas are Russellville, Clarksville, Morrilton, Conway, Lonoke, England, Stuttgart, Fordyce, Ozark, Benton, Malvern, and Carlisle.

The 25 counties comprising the Arkansas River Region had an estimated 1965 population of 815,000 persons, which was about 42 per cent of the State's total estimated 1965 population of 1,929,000. Between 1950 and 1960, the population of the Region increased by about 10,000 persons while the State's total population was declining. Between 1960 and 1965, the Region's population increased by approximately 90,000, nearly two-thirds of the total State increase in this five-year period."

Since a detailed treatment of the socio-economic characteristics is available from the Arkansas River Region study itself, only a summary of the data will be presented at this time. The summaries on population, economy, and public facilities (which include educational institutions) are as follows:⁴¹

Population:

1. "In 1965, the Region had a population estimated to be approximately 815,000 persons, or about 42 per cent of the total State population. The population of the Region was estimated to have increased by approximately 90,000 since the 1960 census, about two-thirds of the total State increase in that five-year period.
2. The 1980 population of the Region is projected to range between 956,150 to 1,058,400 according to projections prepared by the Industrial Research and Extension Center of the University of Arkansas. This projected increase from 724,618 in 1960 will result in numerical gains of from 232,000 to 334,000 persons over the 1960-80 period. For long-range planning purposes, the Region's population was projected for the year 2000 and ranged from 1,262,000 to 1,546,000.
3. By 1980, the urban population is projected to comprise about three-fourths of the total population, with the rural population comprising about one fourth of the total. In 1960, the population was about one-half urban and one-half rural.⁴²

Economy:

1. The Arkansas River Region is supported by an economic structure that provided 218,831 nonagricultural jobs in 1965. From the standpoint of employment, the Regional economy is dominated by service producing activities. Manufacturing is the single largest sector of the economy employing more than one-fourth of all nonagricultural workers.
2. Agriculture is the main basic extractive industry in the Region, but the mineral industry is also important. These industries have declined in relative importance in terms of employment; but in terms of generating increased output and income, they have gained in relative importance.

3. Manufacturing is the largest single basic activity in the economy in terms of employment, output, and income. In 1963, nearly 55,000 were employed, value added was approximately \$450,000,000; and manufacturing payrolls totaled \$237,000,000, reflecting technological improvements, mechanization, and innovation in the manufacturing sector.
4. Per capita income in the Region was \$1,759 in 1963, higher than the State average of \$1,597, but below the National average of \$2,449. In the 1950-63 period, per capita income increased by \$838, a gain of 91 per cent.
5. The Arkansas River Region became a billion-dollar market during the 1950-60 decade in terms of total income. Total personal income increased to an estimated \$1,400,000,000 in 1963.
6. The major factors underlying future manufacturing growth are relative location, transportation facilities, economic ties, available industrial land, water and power, labor supply, and organizations and programs designed to promote industrial growth. Also, the pending development of navigation on the Arkansas River should provide a stimulus for industrial development.
7. Projected 1980 employment levels in the Region range up to 366,000 jobs, 54 per cent greater than the 1960 employment of 237,000. Nonagricultural employment is projected to rise by 133,000 jobs by 1980. Manufacturing is expected to provide more than one-third of all additional jobs and is projected to double over the 20-year period.
8. Projected 1980 personal income in the Region ranges from \$2.5 billion to \$3 billion dollars, or about double that of 1963. Manufacturing is expected to account for more than one-fifth of total personal income by 1980. Per capita income is projected to range between \$2,700 and \$2,800, an increase of approximately \$1,000 from the \$1,760 in 1960.⁴³

Land Use:

1. Agriculture and forestry uses account for about 94 per cent of the total land area of the Region, with agricultural uses accounting for one-third of the total and forestry uses 61 per cent of the total. The remaining six per cent of land area is used for urban, residential, industrial, public, water, and transportation purposes.
2. Land used for urban purposes is increasing rapidly. Between 1960 and 1980, the Region's urban population is projected to nearly double, requiring an additional 156,000 acres, or about double that of 1960. It is recommended by Associated Planners, Inc., that land for parks, open space, and school needs be located and secured in advance of development where possible.
3. The major factors influencing future land use patterns will be increasing population, continued urbanization, and industrialization. The urban population is projected to double in the 1960-80 period, resulting in a doubling of urban land requirements in a relatively short time period. Demands for industrial, recreational, and institutional lands serving the swelling urban population will create pressures for these types of land.⁴⁴

Transportation:

1. The job of the State's highway, railroad, air, and water transportation systems is centered in the Arkansas River Region, and more particularly, in Pulaski County. Major highway routes radiate outward from the State's Capitol City along with the railroads. Major airports are located in Little Rock, Fort Smith, and Pine Bluff. The development of the Arkansas River into a

navigable waterway will serve these major cities in addition to other cities in the Valley along the River.

2. Motor vehicle registration in the Region has been increasing eight per cent annually for passenger cars and 5.7 per cent annually for trucks and buses. This indicates that more than 600,000 passenger cars and 200,000 trucks and buses will be registered by 1980.
3. Three major air carrier airports, 18 general aviation airports, and 20 other airports serve the Region and are well located to serve growing general aviation needs and increasing air carrier needs. However, airport studies indicate a need for new general aviation airports in Lonoke, Arkansas, and Lincoln Counties.
4. The Regional highway plan proposes a functionally classified system developed in cooperation with the Highway Department.
5. Major railroad proposals include extending shortline spurs to river terminal areas and to proposed industrial areas along the Arkansas River and other industrial areas.
6. The water transportation plan indicates the location of proposed port facilities and proposes river oriented industrial sites at suitable locations along the River. It is recommended that these sites be protected for use by river oriented industry. The proposed public port facilities at Little Rock, Fort Smith, and Russellville are located to interchange with other modes of transportation including highway, rail, and air.
7. Major bridge improvements as proposed by the Corps of Engineers in the Arkansas River Development Program include the altering, replacement, and dismantling of 27 highway and railroad structures on the Arkansas River representing an expenditure of \$70,000,000.⁴⁵

Public Facilities:

1. Three senior colleges, two junior colleges, and eight private colleges, with a combined enrollment of 16,432 students in 1965, provide facilities for higher education in the Arkansas River Region. State supported senior colleges are located at Russellville, Pine Bluff, and Conway. It is recommended by Associated Planners, Inc., that by 1980 an additional State supported senior college be located at Little Rock and one additional junior college at Pine Bluff. Also, one additional junior college may be needed at Little Rock if Little Rock University is merged with the University of Arkansas. It is recommended that funds be appropriated to adequately increase the capacity of the State schools.
2. Eight Vocational-Technical Schools serve the Arkansas River Region, and existing facilities are well located to serve the population for the most part. In the future, there will probably be a Vocational-Technical School needed to serve the area between Mena and Hot Springs in the Western part of the Region.⁴⁶

Recreation:

1. Mountains, lakes, and the unparalleled hunting and fishing areas in the Arkansas River Region provide a combination of natural resources unparalleled in the State or in many surrounding states. The Region will be able to achieve its maximum potential when more recreational needs are taken care of through the development of facilities.
2. Recreation deficiencies include overuse and overcrowding at popular recreation sites and lack of adequate facilities near centers of population with two-thirds of the Region's population out of

day-use range of a State park. It is recommended that additional facilities be constructed to meet the deficiencies.

3. The recreation plan proposes the development of recreation complexes, with additional State parks and facilities serving areas not now served by this type facility. A recreation complex is defined as an area where a visitor may find a variety of recreation opportunities within day-use driving radius of approximately 25 miles and should have facilities to handle expected visitors for extended periods of time. Other recommendations include coordination between agencies of Government in the acquisition of land and development of facilities; cooperation between highway and recreation planning to provide access, scenic opportunities, and savings through elimination of overlapping effort; and consideration of organized development of river sites along the Arkansas River and White River."⁴⁷

The 1960 actual population and the 1980 estimated population by subregion and county for the Arkansas River Region is presented in Table XII.⁴⁸

TABLE XII
DISTRIBUTION OF POPULATION BY COUNTY AND URBAN AREA
ARKANSAS RIVER REGION, 1960-80

	1960	1980	Increase 1960-80	Increase Urban	Increase Rural
Arkansas River Region	724,619	1,058,400	333,782	374,936	-41,154
Western Subregion	133,451	189,150	55,699	60,237	-4,538
Crawford County	21,318	38,000	16,682		
Van Buren	6,787	22,800	16,013		
Franklin County	10,213	12,200	1,987		
Ozark	1,965	3,257	1,292		
Sebastian County	66,685	98,850	32,165		
Fort Smith	52,991	89,540	36,549		
Logan County	15,957	20,000	4,043		
Booneville	2,690	4,415	1,725		
Paris	3,007	4,600	1,593		
Scott County	7,297	8,200	903		
Waldron	1,619	3,341	1,762		
Polk County	11,981	11,900	-81		
Mena	4,388	5,691	1,303		
Central I Sub- region	65,895	87,400	21,505	23,063	-1,558
Johnson County	12,421	12,000	-421		
Clarksville	3,919	4,992	1,073		
Pope County	21,177	33,900	12,723		
Russellville	8,921	20,600	11,679		
Atkins	1,391	2,530	1,139		
Conway County	15,430	21,000	5,570		
Morrilton	5,997	12,221	6,224		
Yell County	11,940	16,000	4,060		
Dardanelle	2,098	5,046	2,948		
Perry County	4,927	4,500	-427		

more

TABLE IXX (continued)

Distribution of Population By County and Urban Area, Arkansas River Legion, 1960-80

	<u>1960</u>	<u>1980</u>	<u>Increase 1960-80</u>	<u>Increase Urban</u>	<u>Increase Rural</u>
Central II Sub-region	380,337	582,600	202,263	228,272	-26,009
Van Buren County	7,228	8,000	772		
Cleburne County	9,059	10,000	941		
Heber Springs	2,265	3,462	1,197		
Faulkner County	24,303	41,600	17,297		
Conway	9,791	26,576	16,785		
White County	32,745	50,000	17,255		
Searcy	7,272	22,690	15,418		
Beebe	1,687	3,352	1,655		
Saline County	28,956	45,000	16,044		
Benton	10,399	30,189	19,790		
Pulaski County	242,980	390,000	147,020		
Little Rock	107,813	210,813	103,000		
Sherwood	1,222	5,222	4,000		
North Little Rock	58,032	97,884	39,852		
Cammack Village	1,355	1,500	145		
Jacksonville	14,488	35,000	20,512		
Alexander	177	1,677	1,500		
Lonoke County	24,551	27,000	2,449		
England	2,861	4,662	1,801		
Lonoke	2,359	4,976	2,617		
Prairie County	10,515	11,000	487		
Central III Sub-region	144,935	199,250	54,315	63,364	-9,049
Arkansas County	23,355	28,700	5,345		
Dewitt	3,019	3,836	817		
Stuttgart	9,661	18,719	9,058		
Jefferson County	81,373	126,450	45,077		
Pine Bluff	44,037	91,750	47,713		
Altheimer	979	1,974	995		
Grant County	8,294	9,500	9,500	1,206	
Sheridan	1,938	2,889	951		
Dallas County	10,522	11,500	978		
Fordyce	3,890	5,905	2,015		
Cleveland County	6,944	7,100	156		
Lincoln County	14,477	16,000	1,523		
Star City	1,573	3,388	1,815		

IMPLICATIONS OF SOCIO-ECONOMIC CHARACTERISTICS FOR ARKANSAS HIGHER EDUCATION:

The population decline experienced in the past has been reversed, and the State is expected to have a continuous increase in population to 1980.

Along with the increase in population, it is projected that Arkansas will have a corresponding acceleration in its economic growth. If this acceleration in economic growth is to be realized, it appears that it will depend heavily on the capacity and quality of the educational system and especially on education beyond the high school. In other words, realization of the growth potential for Arkansas depends on the resolve and energy that the State puts behind its efforts to provide the requisite educational input.

Acceleration of the Nation and Arkansas' economic growth is at once both necessary to full employment and dependent upon investment in human capital through various forms of education and technology.

The two quotations listed below, involving education and investments in human capital, appear to highlight this relationship to economic growth. The first is from the presidential address of a distinguished economist, Theodore W. Schultz, at the seventy-third annual meeting of the American Economic Association in 1960.⁴⁹

"Although it is obvious that people acquire useful skills and knowledge, it is not obvious that these skills and knowledge are a form of capital; that this capital is in substantial part a product of deliberate investment; that it has grown in Western societies at a much faster rate than conventional (nonhuman) capital; and that its growth may well be the most distinctive feature of the economic system. It has been widely observed that increases in National output have been large compared with the increases of land, man-hours, and physical reproducible capital. Investment in human capital is probably the major explanation for this difference. I shall contend that such investment in human capital accounts for most of the impressive rise in the real earnings per worker.

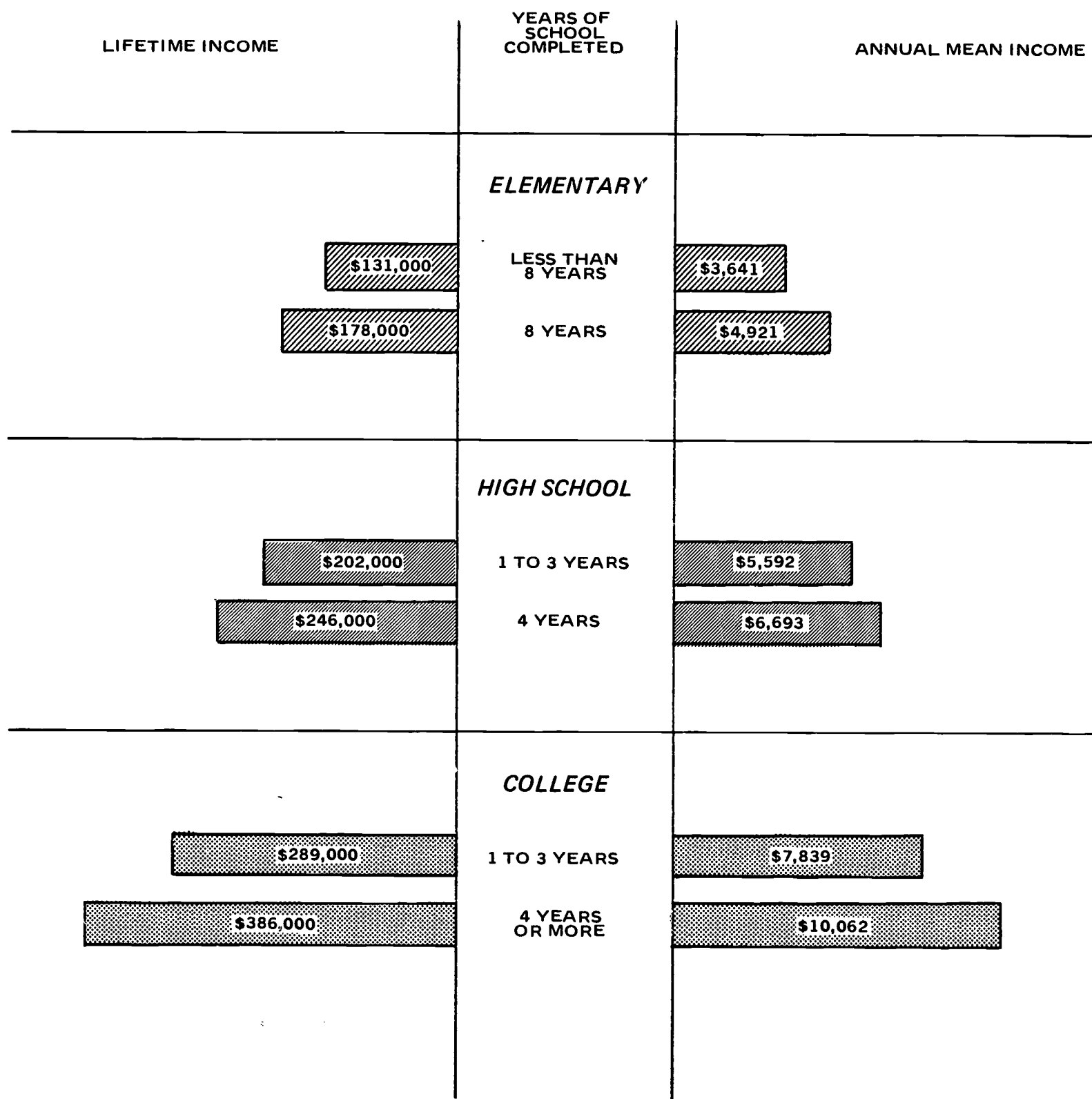
Truly, the most distinctive feature of our economic system is the growth in human capital. Without it there would be only hard, manual work and poverty except for those who have income from property. There is an early morning scene in Faulkner's *Intruder in the Dust* of a poor, solitary cultivator at work in thy field. Let me paraphrase that line, 'The man without skills and knowledge leaning terrifically against nothing'."

The second is from President Johnson's economic report to the 1965 Congress:⁵⁰

"The education of our people is the most basic resource of our society. Education equips man to think rationally and creatively in his quest for knowledge, for beauty, and for the full life; it provides the basis for effective political democracy; and it is the most important force behind economic growth by advancing technology and raising the productivity of workers.

FIGURE II

LIFETIME AND MEAN INCOME IN 1963 OF
UNITED STATES MALES 25-64 YEARS OLD
BY YEARS OF SCHOOL COMPLETED



Source: STATISTICAL ABSTRACT OF THE UNITED STATES, 1966

The impact of education on economic productivity, though long recognized, has recently come to be more widely appreciated. Expenditures on education produce a wide and important array of direct and indirect economic benefits to individuals and to society.

Evidence on the effects of education on productivity is mounting. Increases in conventional inputs of labor and capital explain only about half the growth of output in the economy over the past half century. The rising level of education appears to account for between one-quarter and one-half of the otherwise unexplained growth of output.

Other effects defy both easy cataloging and qualification. They include the impact of education on research and the development of new products and processes, and the economic efficiencies that result from general literacy and substantial educational attainment."

It is clearly evident that better education promotes more responsible, conscientious, and skilled workers who can, because they possess these traits, produce more and earn more. This higher productivity through education is reflected in the fact that, even within the same occupation or profession, those with additional education tend to earn higher take-home pay.

Edward Dennison, a Brookings Institute economist, has recently completed a study indicating that education is directly responsible for 23 per cent of the United States' economic growth through improvement in labor skill. This agrees closely with the conclusions that Theodore Schultz of the University of Chicago reached in an independent study. By analyzing the rate of return to the United States economy on investment in education, Schultz determined that education contributed 21 per cent of the Nation's economic growth between 1929 and 1957. Charles Benson of the University of California maintains, in a study prepared for several National educational associations, that education is responsible for an additional 20 per cent of the country's economic growth through its contribution to technological advances, thus crediting education in total with about 40 per cent of the United States' growth.⁵¹

Support for this estimate is provided by the high correlations that exist between a worker's education and his income. In 1963, the average annual income of employed college graduates was \$10,000, or \$3,300 more than such income of high school graduates. Figure II presents graphically the relationship between lifetime income, annual income, and educational attainment.⁵²

As Arkansas produces more well-educated, well-paid workers, local economic growth will be stimulated through the effects of their spending. These better educated workers will also have more flexibility in their choice of occupations. This is especially important since vocational and technical training is becoming increasingly complicated in industry, leaving behind those workers who have not developed the basic learning tools.

At highly supervisory and management levels, business is recognizing that the broadly educated individual can more readily adapt to new businesses or activities. Such flexibility, through education, thus provides some insurance against high unemployment that might otherwise result from technological changes.⁵³

In conclusion it should again be noted that if Arkansas would participate fully in contributing to the

accelerated economic growth of the Nation and sharing in the benefits therefrom, it must look to education in all forms and at all levels. Further, that realization of the growth potential for Arkansas depends on the resolve and energy that the State puts behind its efforts to provide the requisite educational input.

The educational characteristics of a state and of its citizens are obviously one of the most important socio-economic characteristics. It is recognized that educational characteristics are customarily included in the discussion of a state's socio-economic characteristics; however, since this study concerns higher education and since the educational characteristics of the State are paramount to the study, these characteristics have not been discussed here but are treated separately and in greater detail in Chapter IV.

CHAPTER IV

EDUCATIONAL CHARACTERISTICS, ENROLLMENTS, AND PROJECTIONS

The educational characteristics of a state's citizens and of its college-bound students have a tremendous effect on the kinds and scope of educational programs and services needed in the State. With regard to certain factors such as, but no limited to, level of achievement, literacy, merit scholarship test, and other indices, the facts indicate the Arkansas is confronted by some formidable problems.

Exhibit I contains data reflecting how Arkansas compared in the 1960 census with the National average and with randomly selected other states on the basis of the median school years completed by persons 25 years of age or older. Arkansas with 8.9 years of schooling completed by this age group ranked forty-third in the country. This is considerably below the 10.6 years of schooling as the Nation's average. ⁵⁴

Arkansas ranks fortieth in terms of the percentage of population 14 years of age or older classified as literate. A comparison of Arkansas with selected states, in terms of this percentage, is presented in Exhibit II. ⁵⁵

The results of mental requirement tests used by the Selective Service System places Arkansas in thirty-ninth place in the Nation. These results show that 25.5 per cent of Arkansas draftees failed the pre-induction and induction mental test in 1965. ⁵⁶ (See Exhibit III)

Results of recent National Merit Scholarship Tests show Arkansas to be in forty-eighth place in the Nation in the percentage of students achieving qualifying scores. A comparison of educational achievement in Arkansas with selected states, as reflected by the percentage of the total number of junior students achieving a score of 135 on the National Merit Scholarship Tests in 1965, is presented in Exhibit IV. ⁵⁷

Recent data on scores achieved on the American College Testing Program by Arkansas college-bound students indicate that achievement on these tests is below the National average. A comparison of Arkansas with selected Southern states in terms of the mean scores achieved on the American College Testing Program in the period 1962-1965 is presented in Exhibit V. ⁵⁸ A comparison of the percentage of students in selected Southern states who scored 15 or below on the American College Tests in the period 1962-1965 is presented in Exhibit VI. In Arkansas 20.58 per cent scored 15 or below, while the United States average with 16 per cent. ⁵⁹

The Selective Service Commission at one time administered the Selective Service College Qualification Tests to students who are enrolled in colleges, high school seniors, and applicants for admission to college who might be eligible for military deferment on a scholastic basis. A composite score of 70 on these tests was regarded as a passing grade. The four-state area, which included Arkansas, ranked next to lowest in the percentage of college students earning passing scores on these tests. The data in Exhibit VII are presented in order to show a comparison of the performance of college students from the various states on the Selective Service Qualification Tests administered in 1966. ⁶⁰

COLLEGE-AGE POPULATION, COLLEGE-GOING RATES, ATTENDANCE PATTERNS, ENROLLMENTS, AND PROJECTIONS:

It is sometimes useful to measure enrollment in a state's institutions of higher learning in terms of its relationship to the college-age population. This is at best a rough indication of enrollment expansion among young people, since the actual individuals who enroll in colleges and universities do not necessarily coincide exactly with this age group. However, from such data it is possible to observe enrollment trends in relation to a particular age segment of the population. In this way as the age group grows in number, it is possible to take into account the expansion in the proportion of persons in the age group who are enrolling in higher education.

**EXHIBIT I
STATE OF ARKANSAS**

**COMPARISON OF ARKANSAS WITH OTHER STATES
IN TERMS OF MEDIAN SCHOOL YEAR COMPLETED
BY PERSONS 25 YEARS OR OLDER AS OF 1960**

<u>Rank in Country</u>	<u>State</u>	<u>Median Years of School Completed</u>
1	Utah	12.2
2	Alaska California Colorado Nevada Washington Wyoming	12.1
<hr/>		
25	Indiana Michigan Minnesota	10.8
<hr/>		
	United States	10.6
<hr/>		
42	Georgia	9.0
43	ARKANSAS Mississippi North Carolina	8.9
46	Louisiana Tennessee West Virginia	8.8
49	Kentucky South Carolina	8.7

EXHIBIT II
STATE OF ARKANSAS
COMPARISON OF ARKANSAS WITH SELECTED
STATES IN TERMS OF PERCENTAGE OF
POPULATION 14 YEARS OLD OR OLDER
CLASSIFIED AS ILLITERATE, 1960

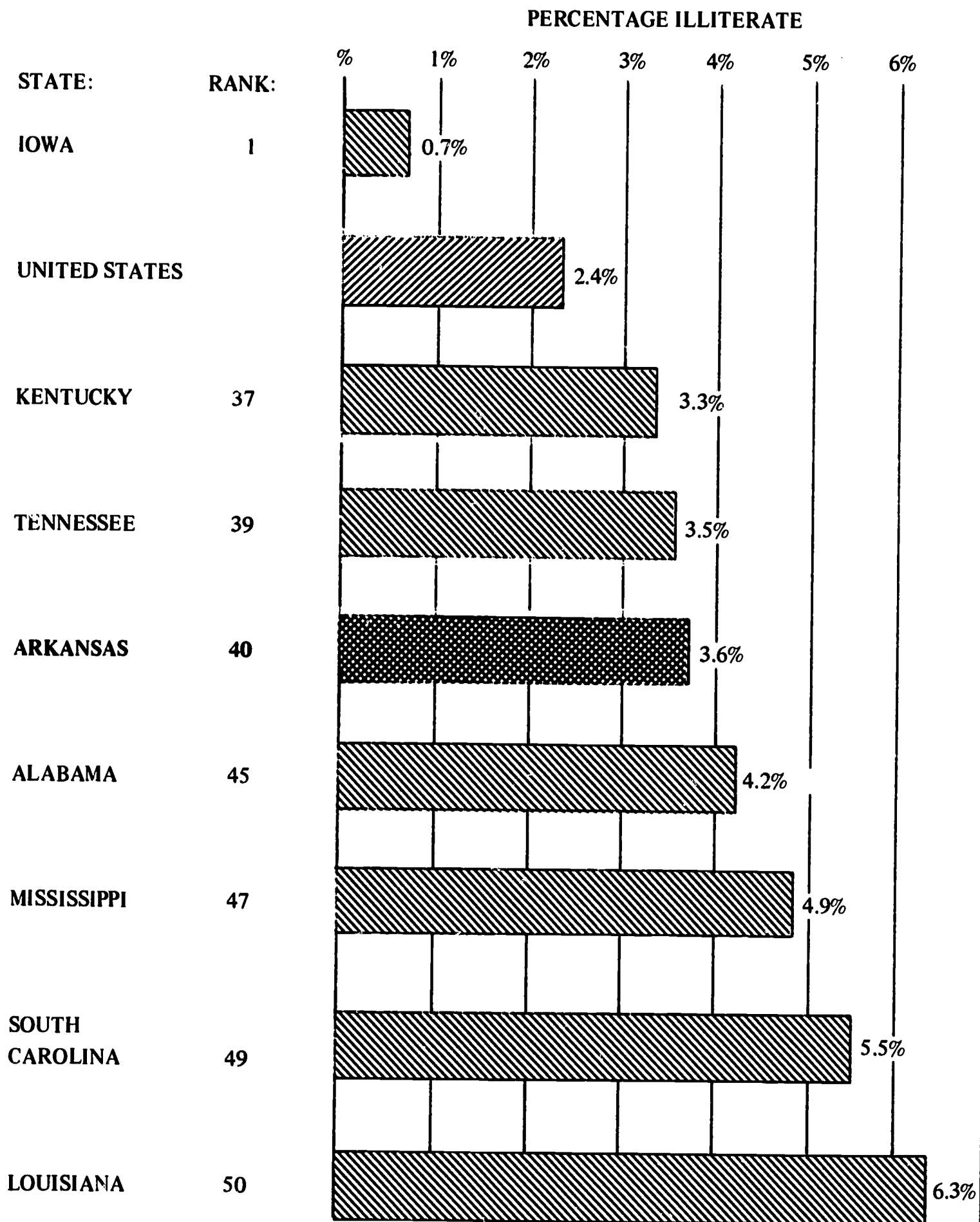


EXHIBIT III
STATE OF ARKANSAS
COMPARISON OF ARKANSAS WITH SELECTED
STATES ON BASIS OF PER CENT OF SELECTIVE
SERVICE DRAFTEES FAILING PRE-INDUCTION
AND INDUCTION MENTAL TESTS, 1965

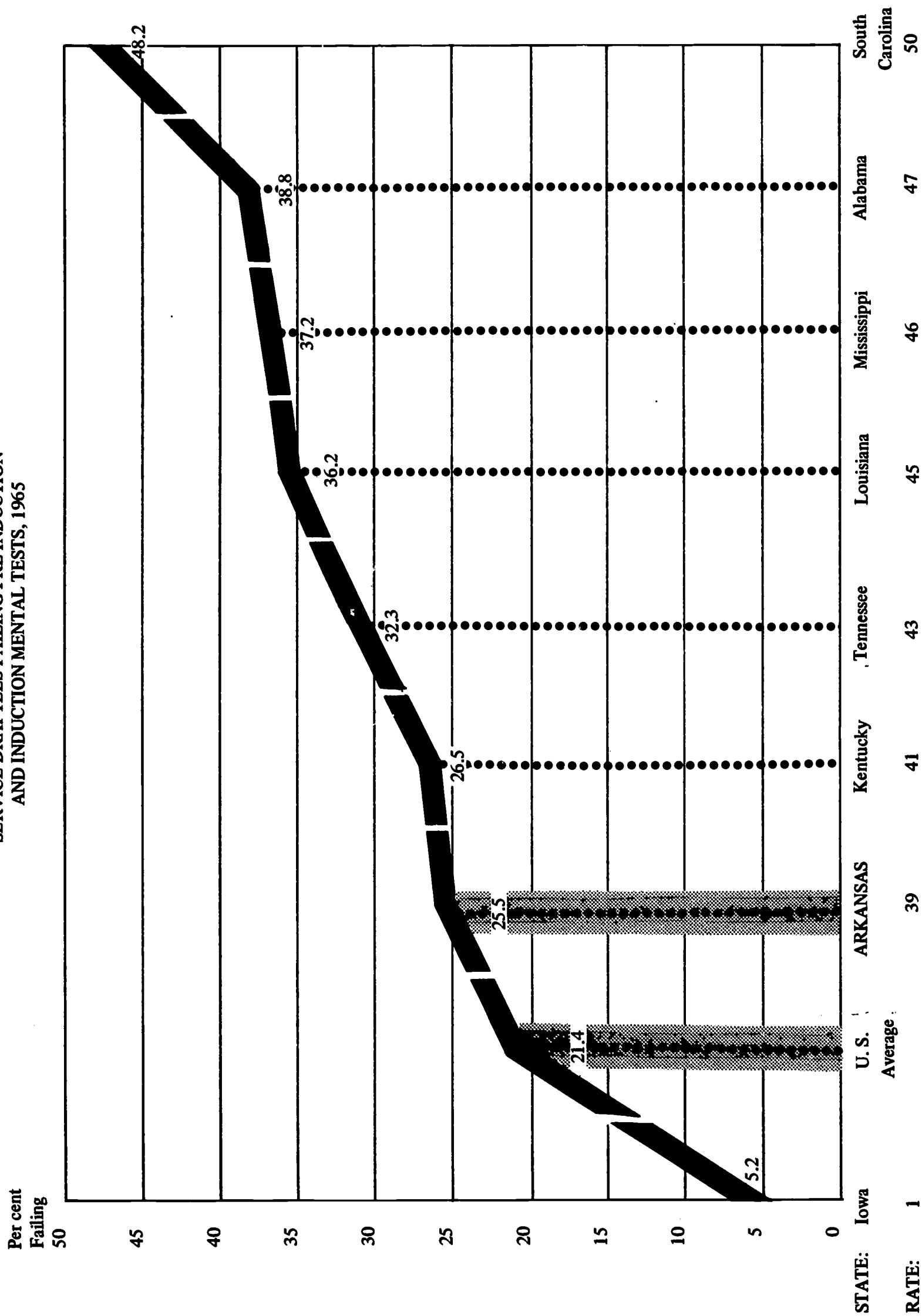


EXHIBIT IV
STATE OF ARKANSAS
COMPARISON OF EDUCATIONAL ACHIEVEMENT IN
ARKANSAS WITH SELECTED STATES AS
REFLECTED BY PERCENTAGE OF TOTAL NUMBER OF
JUNIOR STUDENTS ACHIEVING A SCORE OF 135 ON THE
NATIONAL MERIT SCHOLARSHIP TESTS, 1965

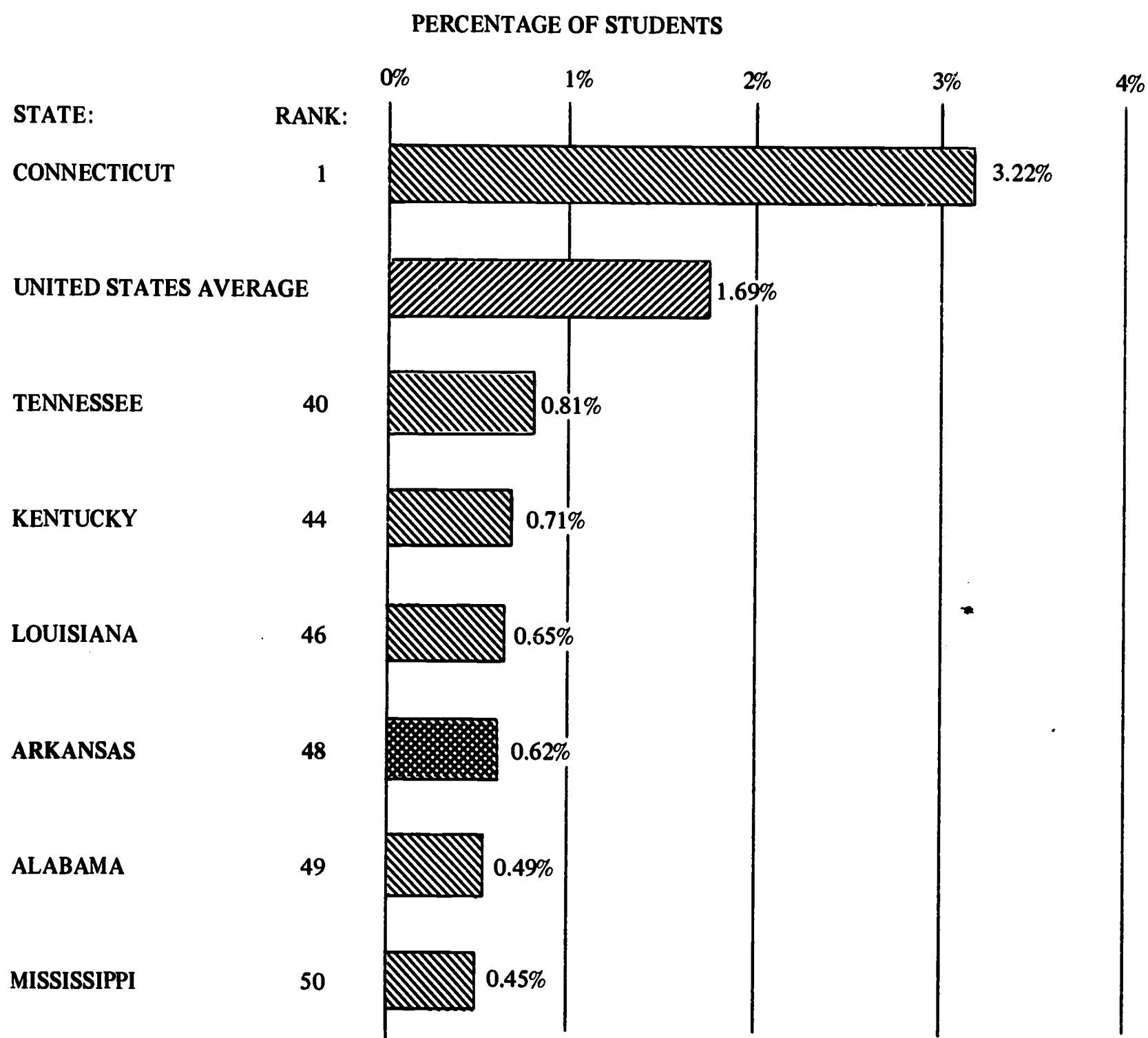


EXHIBIT V
STATE OF ARKANSAS
COMPARISON OF ARKANSAS WITH SELECTED
SOUTHERN STATES IN TERMS OF MEAN SCORES
ACHIEVED ON AMERICAN COLLEGE
TESTING PROGRAM, 1962-1965

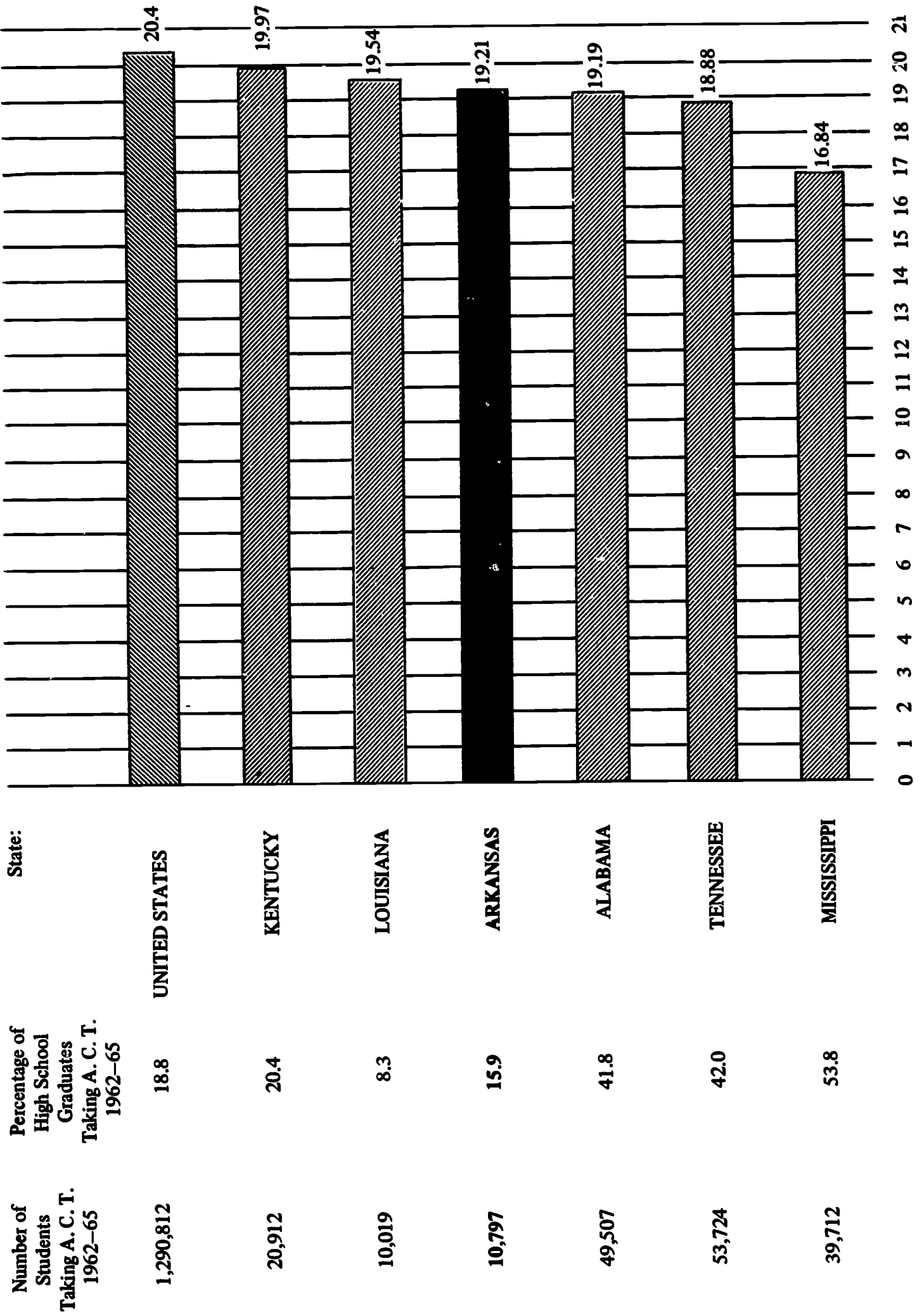


EXHIBIT VI
STATE OF ARKANSAS
PERCENTAGE OF STUDENTS IN SELECTED
SOUTHERN STATES WHO SCORED 15 OR BELOW
ON THE AMERICAN COLLEGE TESTS, 1961-1965

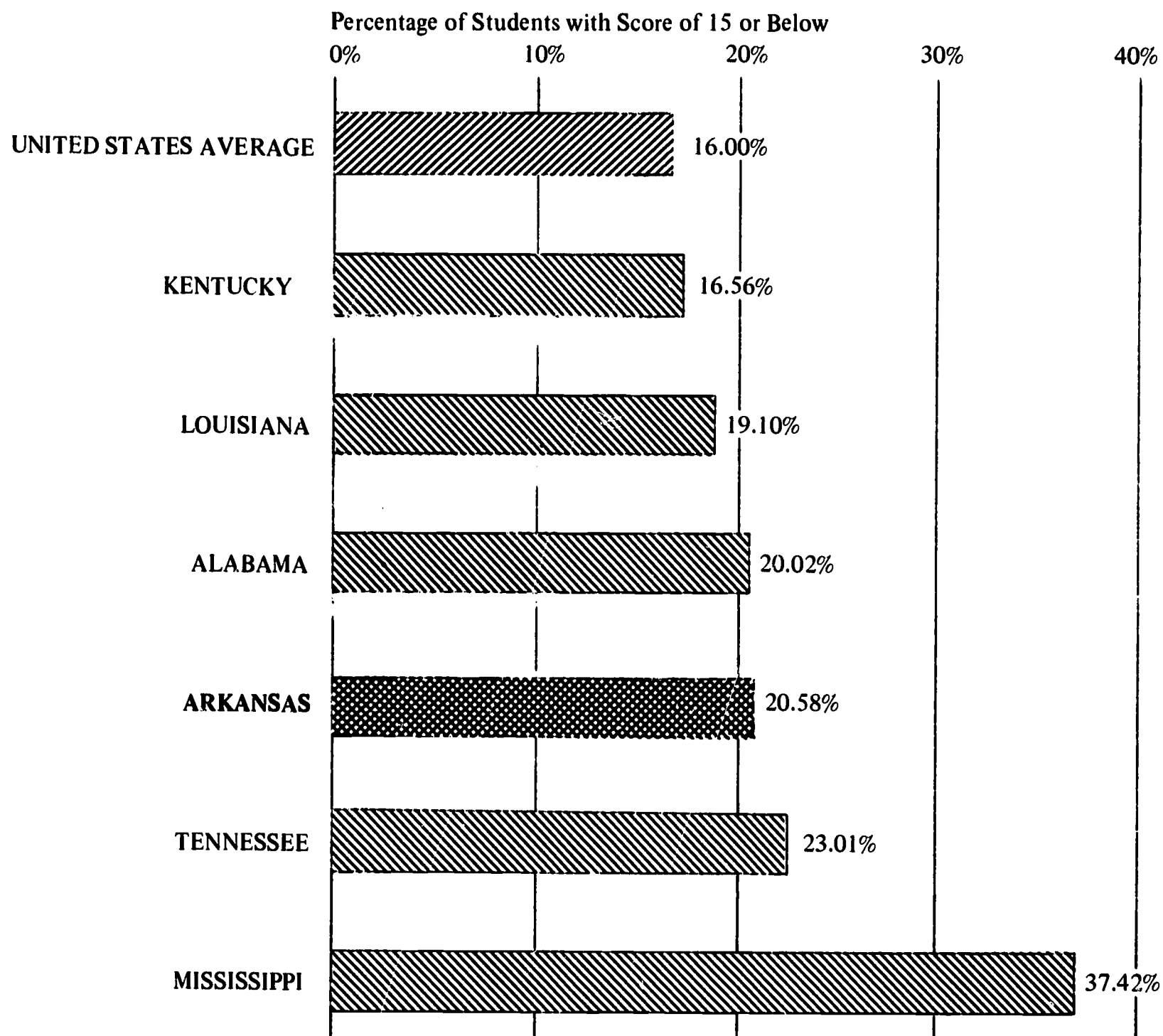


EXHIBIT VII
STATE OF ARKANSAS
PERFORMANCE OF COLLEGE STUDENTS ON
SELECTIVE SERVICE QUALIFICATION TEST
May, 1966

<u>RANK</u>	<u>Region</u>	<u>States in Region</u>	<u>Per cent of Students in Region with Score of 70 or Higher*</u>	<u>No. Students in Region in Sample</u>
1	<u>New England</u>	Connecticut, Massachusetts, Maine, Rhode Island, Vermont, New Hampshire	93%	666
2	<u>Middle Atlantic</u>	New Jersey, New York, Pennsylvania	91	6,782
3	<u>East North Central</u>	Illinois, Indiana, Ohio, Michigan, Wisconsin	88	7,770
4	<u>Pacific</u>	California, Oregon, Washington	87	4,367
5	<u>West North Central</u>	Iowa, Kansas, Minnesota, Missouri Nebraska, North Dakota, South Dakota	84	3,951
	<u>United States</u>		83	34,117
6	<u>South Atlantic</u>	D. C., Delaware, North Carolina, South Carolina, Florida, Maryland, Georgia, Virginia, West Virginia	78	3,849
6	<u>Mountain</u>	Arizona, Colorado, Idaho, Montana, Nevada, Wyoming, New Mexico, Utah	78	1,834
8	<u>Non-Contiguous</u>	Alaska, Guam, Hawaii, Canal Zone, Puerto Rico, Virgin Islands	72	202
9	<u>West South Central</u>	<u>ARKANSAS</u> , Louisiana, Oklahoma Texas	68	2,845
10	<u>East South Central</u>	Alabama, Kentucky, Mississippi, Tennessee	53	1,851
			Total Sample	<u>34,117</u>

*Test results obtained from a 10 per cent student sample from each testing region in the country.

In 1965 the State of Arkansas ranked thirty-sixth among all states of the United States in relationship of enrollment to the college-age group and was also well below the National average. ⁶¹ (See Table XIII)

Table XIV contains a tabulation, by county, of the college-age population in Arkansas based on the 1960 census and a projection, by five-year intervals, of the college-age population to 1980. From an analysis of these data it may be observed that the total college-age population is expected to increase from the 1960 census figure of 93,612 to a projected figure of 160,406 or 66.79 per cent in 1980.

In general, the greatest increases in college-age population will be in those counties adjacent to or in which metropolitan areas (or other urban centers) are located. This is to be expected since it is in keeping with the trend towards greater urbanization in the State. Some of the counties in which the college-age population is expected to show marked increases to 1980 are: Pulaski, Crittenden, Jefferson, Mississippi, Phillips, and Sebastian. This listing does not, by any means, include all of the counties that will have a substantial increase in college-age population by 1980. These counties are pointed out only as examples in a total trend.

TABLE XIII
FALL ENROLLMENTS RELATED TO TOTAL COLLEGE-AGE
POPULATION IN ORDER OF RANK BY PERCENTAGE OF
TOTAL COLLEGE-AGE POPULATION ENROLLED
1965
50 STATES

State	18-21 Year Olds	Fall Enrolls.	Per cent	Rank
Utah	68,461	56,334	82.3	(1)
Arizona	95,542	69,429	72.7	(2)
Oklahoma	135,304	85,366	63.1	(3)
Massachusetts	320,331	200,512	62.6	(4)
Colorado	122,125	72,860	59.7	(5)
Minnesota	198,550	116,103	58.5	(6)
Nebraska	84,708	49,252	58.1	(7)
South Dakota	40,097	23,236	57.9	(8)
Kansas	140,134	80,621	57.5	(9)
California	1,296,860	728,091	56.1	(10)
North Dakota	37,730	20,904	55.4	(11)
Montana	36,701	19,976	54.4	(12)
Wyoming	19,272	10,398	54.0	(13)
Michigan	467,003	251,572	53.9	(14)
Wisconsin	229,985	123,650	53.8	(15)
Iowa	159,223	85,328	53.6	(16)
New Hampshire	37,000	19,581	52.9	(17)
Oregon	128,114	67,688	52.8	(18)
Connecticut	150,586	79,372	52.7	(19)
Vermont	24,857	13,079	52.6	(20)
Missouri	257,057	133,806	52.1	(21)
New York	961,439	491,998	51.2	(22)
Illinois	585,891	295,160	50.4	(23)
Rhode Island	64,913	32,202	49.6	(24)
Idaho	41,278	19,805	48.0	(25)
Indiana	301,695	141,409	46.9	(26)
New Mexico	65,494	30,006	45.8	(27)

more

TABLE XIII (continued)

Fall Enrollments Related to Total College-Age Population in Order of Rank by Percentage of Total College-Age Population Enrolled 1965, 50 States

State	18-21 Year Olds	Fall Enrolls.	Per cent	Rank
West Virginia	103,849	46,805	45.1	(28)
Pennsylvania	618,318	273,795	44.3	(29)
Ohio	601,400	266,363	44.3	(30)
Washington	233,547	103,131	44.2	(31)
Maryland	218,506	96,430	44.1	(32)
Delaware	29,437	12,334	41.9	(33)
Texas	689,334	288,615	41.9	(34)
Nevada	19,117	7,935	41.5	(35)
ARKANSAS	104,118	42,541	40.9	(36)
Louisiana	220,007	89,009	40.4	(37)
Kentucky	189,992	76,172	40.1	(38)
Florida	328,417	130,320	39.7	(39)
Tennessee	260,255	99,139	38.1	(40)
Mississippi	142,558	53,910	37.8	(41)
New Jersey	349,174	127,868	36.6	(42)
Maine	62,485	21,244	34.0	(43)
Hawaii	57,348	19,091	33.3	(44)
North Carolina	333,470	103,774	31.1	(45)
Alabama	218,101	66,515	30.5	(46)
Virginia	305,951	86,431	28.2	(47)
Georgia	284,934	80,271	28.2	(48)
South Carolina	180,957	40,804	22.5	(49)
Alaska	22,948	4,657	20.3	(50)
Service Schools, District of Columbia, and Out- lying Parts	63,571	(D.C.) 115,379		
Total United States	11,708,144	5,570,271	47.6	

Past and Present Enrollments:

Arkansas' institutions of higher learning have had a consistent growth in enrollments during the 1950's and 60's. This growth has been due to a number of factors such as an increase in the number of high school graduates and an increase in the percentage of high school graduates going to college. During the past 10 years the growth in enrollments in Arkansas public colleges and universities has been phenomenal. In fact, during this period every public institution in the State has more than doubled its enrollment. In Table XV a tabulation of actual headcount enrollments in the public institutions of higher learning is presented for the years 1956-57 through 1967-68. From an analysis of data in this table, it may be observed that total enrollment has increased from 13,477 in 1957-58 to 33,296 in 1967-68, or a percentage increase in 147.78 per cent for the 10-year period. In addition to these enrollments 1,572 full-time equivalent students were enrolled in the states' two public community junior colleges.

The growth in enrollments in the private institutions has not been as phenomenal as that in public institutions; however, these institutions have experienced marked growth as evidenced by the enrollment data presented in Tables XVI and XVII. From an analysis of data in Tables XVI and XVII, it may be observed that total enrollment increased from 7,333 in 1962-63 to 11,550 in 1967-68, or by 57.37 per cent.

TABLE XIV

**ARKANSAS COLLEGE-AGE POPULATION BY
FIVE-YEAR INTERVALS, ACTUAL AND PROJECTED
1960-1980**

County	1960*	1965**	1970**	1975**	1980**
Arkansas	1,006	1,806	2,084	2,174	2,222
Ashley	1,130	2,054	2,228	2,333	2,450
Baxter	347	713	735	634	593
Benton	1,627	2,592	2,517	2,555	2,720
Boone	677	1,149	1,124	1,152	1,255
Bradley	649	1,115	1,207	1,208	1,172
Calhoun	268	495	503	505	399
Carroll	465	823	776	689	728
Chicot	834	1,551	1,759	1,866	2,029
Clark	1,944	1,595	1,529	1,566	1,549
Clay	991	1,916	1,782	1,595	1,567
Cleburne	387	721	674	639	680
Cleveland	335	604	568	554	510
Columbia	1,672	1,979	2,172	2,188	2,264
Conway	699	1,327	1,318	1,260	1,218
Craighead	3,424	3,870	3,769	3,877	4,100
Crawford	1,041	1,761	1,694	1,659	1,733
Crittenden	2,349	3,952	4,870	5,532	6,059
Cross	1,020	1,897	1,795	1,835	1,936
Dallas	429	871	933	874	807
Desha	948	1,785	2,026	2,158	2,313
Drew	1,188	1,275	1,253	1,281	1,314
Faulkner	2,255	1,785	1,824	1,840	1,836
Franklin	420	788	768	765	737
Fulton	269	541	492	438	408
Garland	1,790	2,987	3,244	3,350	3,391
Grant	356	672	656	632	571
Greene	1,305	2,166	2,092	1,922	2,024
Hempstead	843	1,524	1,583	1,526	1,467
Hot Spring	975	1,769	1,940	1,842	1,649
Howard	441	791	802	807	825
Independence	929	1,520	1,476	1,432	1,316
Izard	287	518	478	457	407
Jackson	1,095	2,136	2,105	1,889	1,942
Jefferson	4,533	6,227	7,169	7,957	8,275
Johnson	649	940	903	832	864
Lafayette	500	960	969	969	958
Lawrence	940	1,472	1,378	1,383	1,447
Lee	987	1,889	2,111	2,326	2,362
Lincoln	818	1,116	1,225	1,356	1,361
Little River	396	808	841	752	795
Logan	687	1,199	1,117	968	1,049
Lonoke	1,167	2,092	2,147	2,264	2,370
Madison	420	815	745	606	591
Marion	223	471	449	385	346

more

TABLE XIV (continued)

Arkansas College-Age Population by Five-Year Intervals, Actual and Projected, 1960-1980

County	1960*	1965**	1970**	1975**	1980**
Miller	1,454	2,503	2,733	2,634	2,667
Mississippi	4,093	5,839	6,741	7,254	8,291
Monroe	800	1,545	1,737	1,824	1,876
Montgomery	234	408	428	376	328
Nevada	502	887	838	754	783
Newton	293	572	584	451	395
Ouachita	1,309	2,495	2,807	2,902	2,599
Perry	205	415	361	391	363
Phillips	2,170	3,655	4,362	4,758	5,214
Pike	336	632	587	550	502
Poinsett	1,738	2,903	3,001	2,937	3,169
Polk	478	939	893	793	726
Pope	1,679	1,501	1,485	1,501	1,699
Prairie	483	916	869	868	803
Pulaski	13,044	15,459	18,365	21,398	24,427
Randolph	525	975	1,069	1,012	1,005
Saline	1,687	2,113	2,022	2,306	2,088
Scott	1,226	601	529	510	508
Searcy	329	697	690	604	540
Sebastian	320	4,751	5,272	5,409	5,897
Sevier	3,272	787	758	729	709
Sharp	423	511	425	404	409
St. Francis	229	2,971	3,403	3,724	4,062
Stone	299	520	538	514	410
Union	2,112	3,572	4,242	4,366	4,336
Van Buren	262	589	501	487	515
Washington	5,188	3,474	3,744	4,159	4,887
White	2,106	2,547	2,569	2,371	2,489
Woodruff	632	1,268	1,431	1,266	1,278
Yell	469	910	834	859	822
Grand Total Entire State	93,612	137,992	147,648	152,943	160,406

*Actual

**Projected

Enrollment Projections for Public Senior Colleges and Universities to 1980:

At the same time that substantial enrollment growth has occurred during the past 10 years, much attention in Arkansas and the Nation has been given to the rising tide of enrollments which must be anticipated by colleges and universities during the 1970's and beyond. All the pressures which must inevitably result in burgeoning enrollments have long since been discernible, although in some instances they challenge interpretation. The general birth rates and death rate which assure population growth are known. The young people who will enter Arkansas colleges and universities in 1980 were born in 1962; and they, along with their older brothers and sisters, have been carefully counted and recorded. That Arkansas will receive other candidates

TABLE XV

ACTUAL FALL HEADCOUNT 1957-1967
ARKANSAS STATE SUPPORTED SENIOR COLLEGES AND UNIVERSITIES

<u>Fall</u>	<u>AM&N</u>	<u>A&M</u>	<u>APC</u>	<u>ASU</u>	<u>ASU-B</u>	<u>HSC</u>	<u>SCA</u>	<u>SSC</u>	<u>U of A</u>	<u>Total</u>
1957/58	1,147	947	1,029	2,130	112	1,247	1,336	902	5,190	14,340
1958/59	1,351	974	1,171	2,386	162	1,380	1,514	1,103	5,783	15,824
1959/60	1,442	940	1,232	2,217	161	1,252	1,629	1,070	5,461	15,404
1960/61	1,604	930	1,360	2,320	169	1,331	1,681	1,002	5,862	16,259
1961/62	1,942	1,006	1,337	3,087	191	1,599	1,898	1,250	6,388	18,698
1962/63	2,184	1,090	1,499	3,313	185	1,720	1,973	1,405	6,864	20,233
1963/64	2,181	1,148	1,639	3,486	169	1,707	1,968	1,476	7,319	21,093
1964/65	2,490	1,300	1,695	3,886	181	2,016	2,184	1,812	7,864	23,428
1965/66	2,801	1,560	2,029	4,759	337	2,484	2,624	2,177	9,145	27,916
1966/67	2,976	1,639	2,202	5,169	445	2,735	3,214	2,132	9,875	30,387
1967/68	3,288	1,849	2,461	5,878	510	3,127	3,686	2,209	10,288	33,296

TABLE XVI

FALL HEADCOUNT ENROLLMENTS, ARKANSAS PRIVATE SENIOR COLLEGES
AND UNIVERSITIES: 1962-63-1967-68

Institution	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Totals
Arkansas College	263	294	327	336	330	285	1,835
Arkansas Baptist College	200	199	281	230	194	276	1,380
College of the Ozarks	410	403	415	470	486	587	2,771
Harding College	1,164	1,116	1,228	1,472	1,741	1,919	8,640
Hendrix College	627	572	678	767	783	886	4,313
John Brown University	364	435	520	652	664	750	3,385
Little Rock University	1,780	2,191	2,491	3,054	3,238	3,256	16,010
Ouachita Baptist University	1,269	1,260	1,405	1,785	1,881	1,683	9,283
Philander Smith College	618	553	532	628	671	634	3,636
TOTALS	6,695	7,023	7,877	9,394	9,988	10,276	51,253

TABLE XVII
FALL HEADCOUNT ENROLLMENT, ARKANSAS PRIVATE JUNIOR COLLEGES
1962-63-1967-68

Institution	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	Totals
Central Baptist College	200*	187	191	214	246	204	1,242
Crowley's Ridge College				227	214	183	624
Shorter College	238	199	211	200	229	201	1,278
Southern Baptist College	200*	266	384	615	691	686	2,842
TOTALS	638	652	786	1,256	1,380	1,274	5,986

*Estimates

TABLE XVIII

**PROJECTED ENROLLMENT
ARKANSAS STATE SUPPORTED SENIOR COLLEGES AND UNIVERSITIES
1967-1980**

<u>Fall</u>	<u>AM&N</u>	<u>A&M</u>	<u>APC</u>	<u>ASU</u>	<u>ASU-B</u>	<u>HSC</u>	<u>SCA</u>	<u>SSC</u>	<u>U of A</u>	<u>Total</u>
1967/68	3,288	1,849	2,461	5,878	510	3,127	3,686	2,209	10,288	33,296
1968/69	3,527	1,992	2,661	6,504	576	3,413	4,028	2,350	10,922	35,973
1969/70	3,696	2,080	2,799	7,059	639	3,621	4,276	2,447	11,360	37,977
1970/71	3,896	2,184	2,955	7,745	709	3,855	4,599	2,542	11,882	40,367
1971/72	4,156	2,358	3,109	8,510	786	4,178	5,016	2,711	12,562	43,386
1972/73	4,408	2,524	3,324	9,298	861	4,506	5,441	2,881	13,213	46,456
1973/74	4,660	2,684	3,535	10,046	933	4,822	5,863	3,028	13,861	49,432
1974/75	4,860	2,813	3,716	10,688	994	5,080	6,215	3,168	14,370	51,904
1975/76	5,118	2,967	4,011	11,536	1,065	5,376	6,659	3,289	15,025	55,046
1976/77	5,374	3,137	4,214	12,449	1,148	5,666	7,102	3,403	15,673	58,166
1977/78	5,620	3,297	4,433	13,379	1,228	6,037	7,587	3,557	16,293	61,431
1978/79	5,924	3,499	4,693	14,438	1,322	6,487	8,145	3,743	17,053	65,304
1979/80	6,143	3,638	4,883	15,241	1,400	6,868	8,551	3,903	17,600	68,227
1980/81	6,379	3,781	5,106	16,046	1,470	7,254	9,001	4,067	18,189	71,293

for admission through the in-migration of families to the State is a known and predicted fact. The changing technology of the State, the increasing affluence of its citizens, and the rising educational aspirations of its population as a whole assure that a larger and larger proportion of young people of college age will require education beyond the high school. Further, increased numbers of adults are seeking to update or extend their general educational or professional skills while the actual rate of this increasing demand challenges precise measurement; the fact of its imminent rise seems clear.

Enrollment in Arkansas public senior colleges and universities is expected to increase from 33,296 in 1967-68 to 71,293 in 1980-81. This represents an increase of 37,997 students, or a percentage increase of 114.40 per cent. A tabulation, by institution and year, of the projected increase in enrollment in the State institutions of higher learning is presented in Table XVIII. From an analysis of the data in Table XV and Table XVIII, it may be observed that on the basis of projected enrollments, five of the six institutions other than the University of Arkansas will have enrollments greater than the 1960 enrollment of the University of Arkansas; and that the University of Arkansas and Arkansas State University will both have enrollments in 1980 greater than the total enrollments for all public institutions in 1960.

The projected increase in enrollment will present some formidable problems for Arkansas higher education in such areas as facilities, programs, faculty, administration, and coordination. If the needs of higher education are to be met during this critical period, it will also mean that Arkansas must make a financial commitment to higher education which will be much greater than it has ever been in the history of the State.

Although enrollment in Arkansas' public senior colleges and universities is expected to more than double by 1980 and that this will require a greatly increased expenditure for higher education, some advantages should accrue to the various institutions through increased enrollments. Among these advantages are:

1. The colleges by 1980 will, in general, have reached the point in enrollment where expenditures, as a per cent of the total operational and general budget, should not be disproportionately high for such expenditure items as general administration and student services, general institutional expense, departmental operating expense, instructional administration, and other non-instructional items.
2. Instructional costs in typical low-enrollment, high-cost programs in all the institutions can reasonably be expected to decrease percentage-wise due primarily to the increased class size made possible by an increased enrollment in these programs.
3. The increase in upper level and graduate enrollments in institutions currently offering only master's level work should allow these institutions to materially strengthen their programs and to make them more educationally and economically feasible.
4. The institutions not currently offering master's level work will have enrollments large enough to make it feasible for them to begin planning for the offering of graduate work in limited areas.
5. By 1980 enrollments in the institutions currently providing professional, advanced graduate, and research programs should have reached the point where these programs can be both strengthened and broadened. Even though expenditures for advanced graduate, professional, and research programs should be increased materially, the increased enrollments in these programs should reduce unit costs on a comparative basis.
6. Additional facilities will have to be constructed at all the institutions to accommodate increased enrollments. However, the combination of larger enrollments and increased student credit hour production should lead to better utilization of facilities, especially classrooms and laboratories, at all institutions.

Projected Enrollments for Public Junior Colleges:

The enrollment projections for Arkansas public community junior colleges were made with the assumption

TABLE XIX

**PROJECTED FULL-TIME EQUIVALENT ENROLLMENT IN PUBLIC JUNIOR COLLEGES
1970-71-1980-81**

<u>Fall</u>	<u>Benton</u>	<u>Garland</u>	<u>Jefferson</u>	<u>Mississippi</u>	<u>Phillips</u>	<u>Pulaski</u>	<u>St. Francis</u>	<u>Sebastian</u>	<u>Union</u>	<u>Totals</u>
1968/69					408			1164		1572
1969/70					506			1240		1746
1970/71	201	324	717	674	611	1837	272	1318	424	6378
1971/72	253	359	806	753	711	2087	347	1378	469	7163
1972/73	304	394	898	834	784	2349	424	1438	515	7940
1973/74	356	430	994	917	920	2624	503	1499	561	8804
1974/75	408	466	1092	1001	1029	2911	585	1560	608	9660
1975/76	460	536	1273	1161	1142	3424	670	1623	699	10,988
1976/77	518	604	14444	1343	1261	3961	758	1707	785	12,381
1977/78	577	673	1617	1534	1383	4522	849	1793	871	13,819
1978/79	637	742	1793	1733	1509	5108	943	1882	957	15,304
1979/80	699	812	1971	1940	1639	5717	1039	1973	1042	16,832
1980/81	762	882	2152	2156	1773	6351	1137	2063	1127	18,403

that the State will adopt a plan for a statewide system of community junior colleges. If this is done, it is estimated that the State will have 11 junior colleges by 1980; and that the total enrollment in these colleges will be 22,463. Table XIX contains a tabulation of enrollment projections by year to 1980-81 for nine of the proposed junior colleges. In addition to the total of 18,403 students shown in the table, it is anticipated that 4,060 students would be added by the two other junior colleges which would be established during this period.

Enrollment Projections for Private Institutions to 1980:

Enrollment in Arkansas' private institutions is expected to increase from 11,550 in 1967-68 to 23,969 in 1980-81. This represents an increase of 12,419 students, or a percentage increase of 107.61 per cent.

A tabulation, by institution and year, of the projected increase in enrollment is presented in Tables XX and XXI.

TABLE XX
PROJECTED HEADCOUNT ENROLLMENTS
ARKANSAS PRIVATE SENIOR COLLEGES AND UNIVERSITIES
1967-68 – 1980-81

	<u>1967-68*</u>	<u>1970-71</u>	<u>1975-76</u>	<u>1980-81</u>	<u>Total</u>
Arkansas College	285	530	600	600	2,015
Arkansas Baptist College	276	400	600	800	2,076
College of the Ozarks	587	700	825	1,000	3,112
Harding College	1,919	2,352	3,300	4,628	12,199
Hendrix College	886	1,000	1,200	1,200	4,286
John Brown University	750	1,000	1,250	1,250	4,250
Little Rock University	3,256	4,396	6,296	8,200	22,148
Ouachita Baptist University	1,683	1,905	2,024	2,341	7,953
Philander Smith College	<u>634</u>	<u>825</u>	<u>1,025</u>	<u>1,400</u>	<u>3,884</u>
TOTALS	10,276	13,108	17,120	21,419	61,923

*Actual

College Going Rates and Attendance Patterns:

Nationally the rapid increase in college and university enrollments has been due to an increase in the total number of high school graduates and an increase in the percentage of high school graduates going to college. The same factors have been responsible for the growth in enrollments in Arkansas' institutions of higher learning. The number of high school graduates had increased from approximately 14,000 in 1960 to more than 24,000 in 1966. The per cent of high school graduates attending college increased from 36.2 per cent in 1960 to 45.0 per cent in 1966. 62

TABLE XXI

**PROJECTED HEADCOUNT ENROLLMENTS
ARKANSAS PRIVATE JUNIOR COLLEGES
1967-68 – 1980-81**

	<u>1967-68*</u>	<u>1970-71</u>	<u>1975-76</u>	<u>1980-81</u>	<u>Total</u>
Central Baptist College	204	300	500	700	1,704
Crowley's Ridge College	183	250	400	600	1,433
Shorter College	201	300	350	400	1,251
Southern Baptist College	<u>686</u>	<u>775</u>	<u>850</u>	<u>850</u>	<u>3,161</u>
TOTALS	1,274	1,625	2,100	2,550	7,549
*Actual					

Dr. Vance Sales, Professor of Education at Arkansas State University, has, since 1960, conducted biennial studies of the college attendance patterns of Arkansas' high school graduates. Table XXII has been condensed from a larger summary of Dr. Sales' study. From an analysis of data presented in Table XXII it may be observed that: ⁶³

1. The per cent of high school graduates enrolling in college had increased from 36.2 per cent in 1960 to 45.0 per cent in 1966.
2. The per cent of college enrollees who attended colleges in Arkansas increased from 81.0 per cent in 1960 to 88.1 per cent in 1966.
3. The per cent of college enrollees who attended out-of-state colleges decreased from 19.0 per cent in 1960 to 11.9 per cent in 1966.
4. The per cent of college enrollees attending public institutions has been increasing gradually since 1960, and the per cent attending private institutions has been gradually decreasing. In 1966 public institutions enrolled 76.4 per cent of the new enrollees, and the private institutions enrolled 18.1 per cent. In 1966 the community junior colleges enrolled 4.1 per cent of the new enrollees.

It has been pointed out by Dr. Sales that the level of accreditation and the size high school attended also influence the percentage of high school graduates who attend college. ⁶⁴

From an analysis of studies on the effects of personal income and the proximity of an institution on college-going rates of high school graduates in a given area, it is clearly evident that all these factors are influencing the college attendance rates of Arkansas high school graduates.

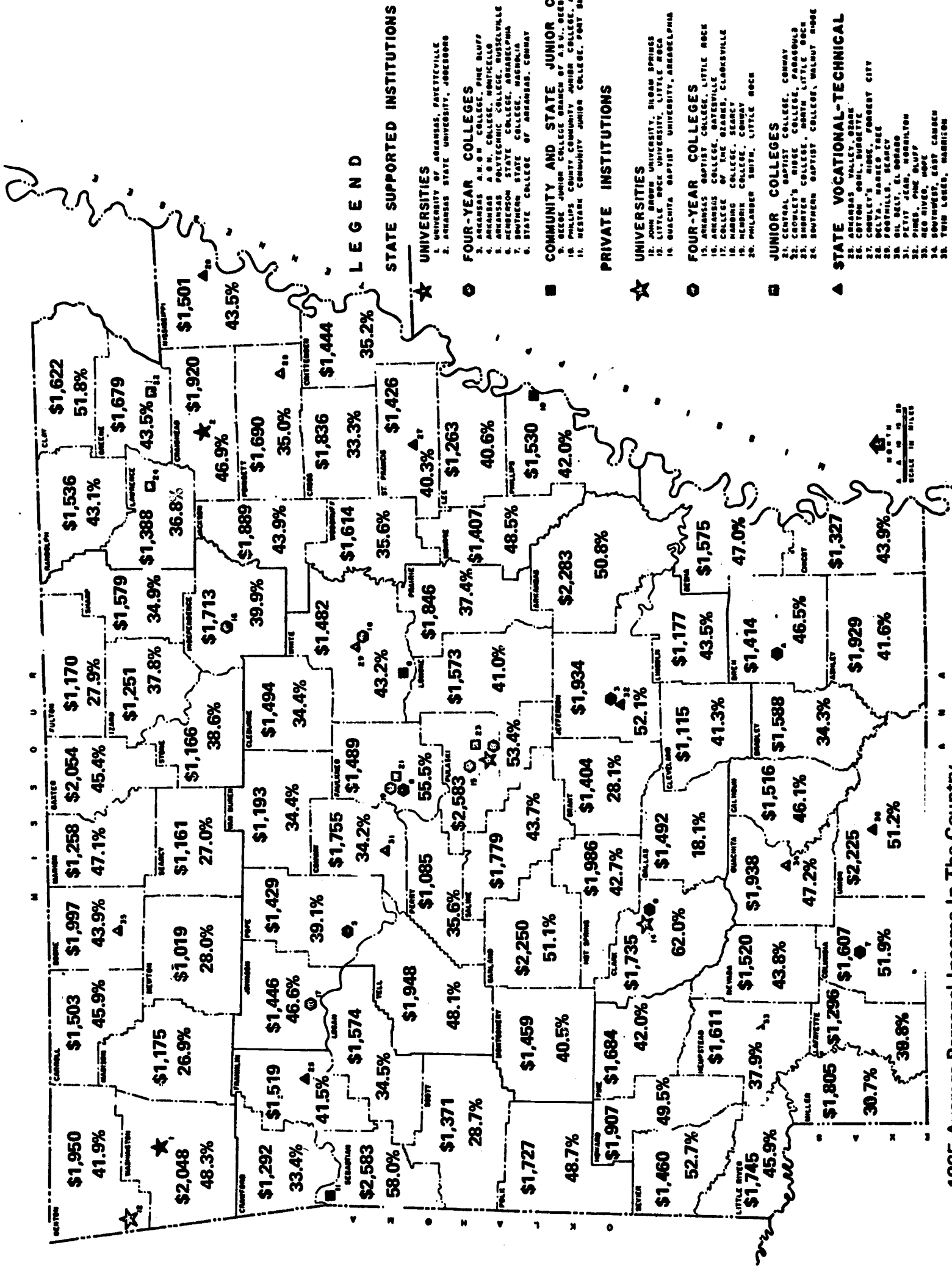
Data presented in the map below reflects the per cent of 1966 high school graduates, by county, who attended college in Arkansas, 1965 personal income, by county, and the location of institutions of higher learning in the State. It is realized that one year's statistics cannot be used to establish trends; however, an analysis of the data does indicate the relationship between location of college, personal income, and the college-going rates during this specific period.

From an analysis of data presented in this map, it may be observed that, in general, the counties having the highest percentage of high school graduates attending college also have one or more institutions of higher learning located in, or in close proximity to, the county. These counties are, in most instances, also the counties in which personal income is relatively high.

TABLE XXII
COMPARATIVE SUMMARY OF THE 1960, 1962, 1964, AND 1966
SURVEYS OF ARKANSAS PUBLIC HIGH SCHOOL GRADUATES*

Items	1960 Survey	1962 Survey	14 Survey	1966 Survey
1. Number of graduates in survey	14,998	15,573	17,398	24,768
2. Number of graduates who enrolled in college	5,432	6,124	7,806	11,146
3. Per cent of graduates enrolled in college	36.2%	39.3%	44.9%	45.0%
4. Number of college enrollees who attended college in Arkansas	4,422	5,173	6,578	9,822
5. Per cent of college enrollees who attended colleges in Arkansas	81.0%	84.0%	84.3%	88.1%
6. The per cent of college enrollment in Arkansas by colleges:	(Placed in rank order based on 1960 survey or 1966 if not included in 1960.)			
a. University of Arkansas	20.0%	22.7%	19.8%	17.6%
b. Arkansas State College	14.0%	13.6%	14.9%	14.4%
c. Arkansas State Teachers	10.0%	10.3%	11.7%	11.1%
d. Arkansas A M & N	--	--	--	7.2%
e. Arkansas Polytechnic	9.0%	8.4%	8.0%	6.9%
f. Henderson State Teachers	7.0%	9.0%	8.1%	8.1%
g. Arkansas A & M College	7.0%	5.6%	6.1%	5.1%
h. Ouachita Baptist College	7.0%	4.9%	5.4%	4.0%
i. Southern State College	6.0%	8.7%	7.7%	6.0%
j. Little Rock University	5.0%	3.4%	4.2%	3.9%
k. Hendrix College	4.0%	3.2%	3.3%	2.1%
l. Fort Smith Junior College (Westark Junior College)	4.0%	3.8%	3.5%	3.6%
m. Philander Smith College	--	--	--	1.6%
n. Harding College	3.0%	2.5%	1.7%	1.5%
o. Arkansas College	1.0%	1.3%	.8%	.3%
p. Southern Baptist College	1.0%	.9%	1.9%	2.0%
q. Shorter College	--	--	--	.7%
r. College of the Ozarks	1.0%	1.2%	.9%	.7%
s. Phillips County Community College	--	--	--	.5%
t. John Brown University	.7%	.3%	.3%	.2%
u. Central Baptist College	.3%	.3%	.9%	.4%
v. Crowley's Ridge College	--	--	.7%	.4%
w. Arkansas Baptist College	--	--	-	.3%
7. Number of college enrollees who attend out-of-state colleges	1,010	951	1,228	1,324
8. Per cent of college enrollees who attended out-of-state colleges	19.0%	16.0%	15.7%	11.9%

*Taken from "The Arkansas High School Graduates of 1966" by Dr. M. Vance Sales, Professor of Education, Arkansas State University, March, 1967.



UNIVERSITIES, COLLEGES AND VOCATIONAL- TECHNICAL SCHOOLS OF ARKANSAS

CHAPTER V

HISTORICAL DEVELOPMENT OF INSTITUTIONS

A thorough understanding of the present status of higher education in Arkansas requires some knowledge of the historical development of each of the institutions of higher learning.

Arkansas, like many other states, does not suffer from a lack of senior colleges and universities. However, like states with similar historical development patterns, Arkansas would probably have preferred to have some of its institutions of higher learning established in areas quite different from where they are currently located.

The higher educational needs of Arkansas are presently being served by two State supported universities, six State supported senior colleges, two public junior colleges, three private universities, six private senior colleges, and four private junior colleges.

The map below indicates the name, location by county, and type control of each of the public and private institutions of higher learning in the State. This map also indicates the name and location of the State's area vocational-technical schools. The data in Table XXIII reflects the name, location, type control, and 1967 fall enrollment in each of these institutions.

In the following presentation of historical data, institutions are, for reasons of convenience, grouped in four major categories—public senior colleges and universities, public junior colleges, private senior colleges and universities, and private junior colleges.

Public Senior Colleges and Universities

The historical development of each of the public colleges and universities has been summarized by the various institutions as follows:

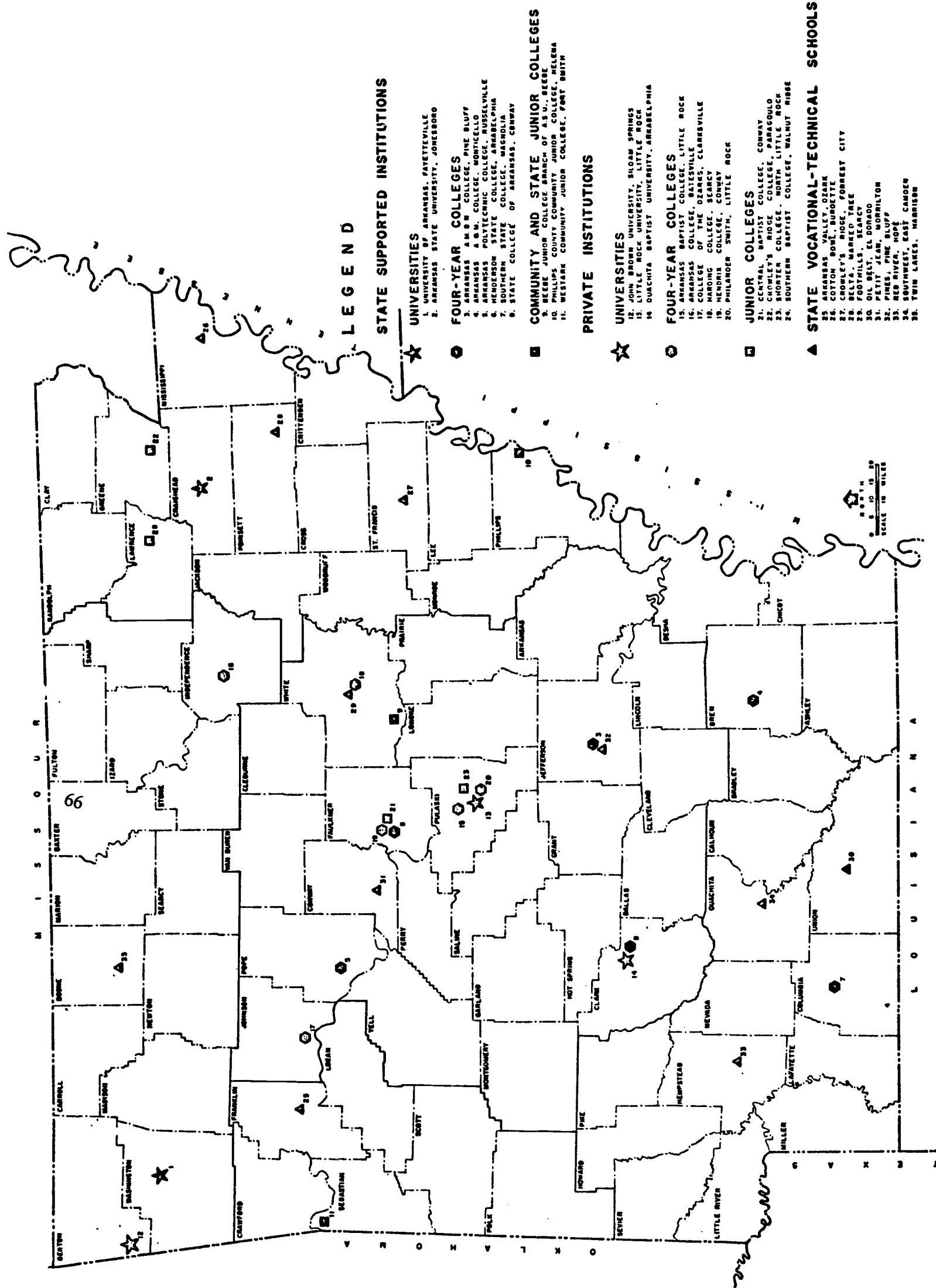
Arkansas Agricultural and Mechanical College.⁶⁵

Act 100 of the 1909 General Assembly established the Fourth District Agricultural School, now known as Arkansas Agricultural and Mechanical College. The Fourth District was to be comprised of and Trustees to be appointed from the following counties: Lonoke, Prairie, Monroe, Lee, Phillips, Arkansas, Jefferson, Grant, Dallas, Cleveland, Lincoln, Desha, Drew, Bradley, Calhoun, Union, Ashley, and Chicot. The School opened for the first time on September 14, 1910.

TABLE XXIII

NAME, LOCATION, TYPE CONTROL, AND 1967 FALL ENROLLMENTS IN EACH INSTITUTION OF HIGHER LEARNING

Institution	Location	Type Control	1967 Fall Headcount Enrollment
University of Arkansas	Fayetteville	Public	10,288
Arkansas State University	Jonesboro	Public	5,876
Arkansas A M & N College	Pine Bluff	Public	3,288
Arkansas A & M College	Monticello	Public	1,849
Arkansas Polytechnic College	Russellville	Public	2,461
Henderson State College	Arkadelphia	Public	3,127
	more		



UNIVERSITIES, COLLEGES AND VOCATIONAL- TECHNICAL SCHOOLS OF ARKANSAS

TABLE XIII (continued)

Name, Location, Type Control, and 1967 Fall Enrollments in Each Institution of Higher Learning

Institution	Location	Type Control	1967 Fall Headcount Enrollment
Southern State College	Magnolia	Public	2,209
State College of Arkansas	Conway	Public	3,686
Beebe Junior College, Branch of Arkansas State University	Beebe	Public	510
Phillips County Community Junior College	Helena	Public	319
Westark Community Junior College	Fort Smith	Public	1,698
John Brown University	Siloam Springs	Private	750
Little Rock University	Little Rock	Private	3,256
Ouachita Baptist University	Arkadelphia	Private	1,683
Arkansas Baptist College	Little Rock	Private	276
Arkansas College	Batesville	Private	285
College of the Ozarks	Clarksville	Private	587
Harding College	Searcy	Private	1,919
Hendrix College	Conway	Private	886
Philander Smith	Little Rock	Private	634
Central Baptist College	Conway	Private	204
Crowley's Ridge College	Paragould	Private	183
Shorter College	No. Little Rock	Private	201
Southern Baptist College	Walnut Ridge	Private	686

The first academic offerings were entirely on the secondary level and consisted for the most part of subjects involving Agriculture, Home Economics, and Manual Arts. In 1923 the School began to offer junior college work, and from 1923 to 1933 both secondary level and junior college level work were offered. The Trustees authorized the College to become a four-year institution of higher education in 1939 and ceased to offer high school work. The College was accredited by the North Central Association for junior college work in 1928 and for senior college work in 1940.

Act 45 of the 1925 General Assembly designated the institution as the Agricultural and Mechanical College and the Fourth District of the State of Arkansas. The present name of the College came as a result of Act 106 of the 1939 General Assembly. Since the early days of the College, when it was primarily agricultural, it has gradually changed toward teacher training and to offering a curriculum in the Liberal Arts.

Arkansas Agricultural, Mechanical, and Normal College: 66

Act 97 of 1873 created a branch of Arkansas Industrial University (now the University of Arkansas) and what is now Arkansas Agricultural, Mechanical, and Normal College. The institution was first opened on September 27, 1875. From its beginning it has been a State supported Land-Grant Institution for Negroes.

In 1921 the name of the School was changed from Branch Normal College to State Agricultural, Mechanical, and Normal School. During the period from 1882 to 1894 the School conferred 10 Bachelor of Arts degrees; then the School operated as a junior college from 1894 to 1929. In 1929 the School was expanded into a standard four-year college, and in 1933 it was certified as a standard four-year college.

The program of the institution at the beginning was primarily that of an industrial nature. Departments in earlier years included such as an Agricultural Department, Shoemaking Department, Dairy Department, Harness

Department, Wheelwright Department, Department of Domestic Economy, Brickmaking Department, Printing Plant, etc. This type of work was reflected by the number of bachelor's degrees (10 in number) which had been awarded by 1906.

In 1927 the Governor appointed an independent Board of Trustees. It was not until 1929 that the School became a standard four-year college which offered bachelor's degrees and continued with two-year certificates as a holdover from its junior college days. The curriculum expanded rapidly from 1929 to 1934. By 1934 the Division of Arts and Sciences offered degrees in Biology, Chemistry, English, History, Mathematics and Physics, and Foreign Languages. The College department added the Division of Mechanical Arts and offered a Pre-Medical curriculum. A Division of Health and Physical Education was added two years later, along with a concentration in the Social Sciences.

The College was accredited by the North Central Association in 1950 and has become the primary institution for the education of Negro teachers in the State. For the past few years the fields of Liberal Arts and Fine Arts have grown at the institution. Degrees are presently awarded in 33 areas of concentration.

Arkansas Polytechnic College: 67

Arkansas Polytechnic College was created by Act 100 of the 1909 Arkansas General Assembly as the Second District Agricultural School. Counties included in the Second District were: Marion, Boone, Carroll, Benton, Washington, Madison, Newton, Searcy, Van Buren, Conway, Pope, Johnson, Franklin, Crawford, Sebastian, Logan, Yell, Perry, Scott, and Faulkner. The School opened its doors for students in the fall of 1910 with an enrollment of 176.

In 1921 as the needs for secondary education in rural areas began to be more adequately met; and as the need for wider access to higher education became more evident, college work was added—the freshman year in 1921-22, the sophomore year in 1922-23, the junior year in 1923-24, the senior year and the baccalaureate degree in 1924-25. It was in 1925 that the School's name was changed to Arkansas Polytechnic College. By 1929 all high school work was eliminated and the Board had decided to drop the last two years of college work.

From 1929 to 1948 the College was a junior college offering broad programs in Liberal Arts, Education, Business Administration, Agriculture, Engineering, and Home Economics. Also, terminal vocational programs in Cabinet-making, Carpentry, Auto Mechanics, Machine Shop, Flight Training and Aviation, and Engine Mechanics were offered. After the post-war surge vocational programs were gradually phased out.

Changes in demands for higher education caused the Board to convert the College from a junior college to a four-year institution in 1948. Degree programs were offered in General Business, Business Education, Elementary and Secondary Education, Physical Education, English, Biology, Chemistry, Mathematics, History and Political Science, Economics and Sociology, and Music with two years of college work in the technical areas of Agriculture, Home Economics, and Engineering.

The College has been accredited by the North Central Association for 35 years. It was first accredited as a junior college in 1931.

Arkansas State University: 68

Arkansas State College was established by Act 100 of 1909 as a District Agricultural School. Its area of the State was the First District, which was composed of the following counties: Baxter, Fulton, Sharp, Randolph, Clay, Green, Lawrence, Izard, Stone, Independence, Jackson, Craighead, Poinsett, Mississippi, Crittenden, Cross, St. Francis, Woodruff, White, and Cleburne.

The vocational high school opened in temporary quarters in downtown Jonesboro in 1910. In 1918 the School was reorganized as a junior college; and in 1925, by an Act of the General Assembly, the name was

changed to the State Agricultural and Mechanical College. The North Central Association accredited the two-year institution in 1928. An act of 1925 expanded the curriculum of the College to be that of a four-year teacher training institution and by 1930 such work was being offered. A curriculum in Engineering was added; and in 1931 the degrees of Bachelor of Science, Bachelor of Arts, and Bachelor of Science in Education were first conferred. In 1933 the Legislature changed the name to Arkansas State College, and the School was admitted to the North Central Association as a degree-granting institution. The 1967 General Assembly changed the name of the institution to Arkansas State University.

A graduate program was developed in 1955 with the first graduate degree being the Master of Science in Education. In 1966 graduate offerings were expanded to include the Liberal Arts and Sciences, and in 1966 the College was authorized to grant the degree of Master of Arts in History and Master of Science in Biology and Chemistry.

Along with the expansion of graduate degrees and enlargement of graduate course offerings, there has been a steady diversification of undergraduate degree curricula. The Bachelor of Music degree was first authorized in 1936, the Bachelor of Science in Agriculture in 1950, the Bachelor of Music Education degree in 1952, and the Bachelor of Fine Arts degree in 1957.

Henderson State College: 69

Arkadelphia Methodist College was established in 1890, supported by the Methodist Church and the City of Arkadelphia. In 1904 the name of the College was changed to Henderson College, and in 1909 the name was changed to Henderson-Brown College. Act 46 of the 1929 Arkansas General Assembly changed the status of the College to a State supported institution and changed its name to Henderson State Teachers College. The name was changed again by the 1967 General Assembly to Henderson State College.

A separate Division of Extension and Correspondence work was organized in 1945. During 1951-53 a graduate center for the University of Arkansas was operated on the campus. In 1955 a program of graduate studies leading to the Master's Degree in Education was inaugurated to continue the primary aim of teacher preparation.

Within the past few years, Liberal Arts has been emphasized more in the offerings of the College. The Bachelor of Science degree in Business Administration was approved in 1964, and an increasing number of students have enrolled each year.

Southern State College: 70

Act 100 of the 1909 Arkansas General Assembly created the Third District Agricultural School, now Southern State College. It was specified that Agriculture, Horticulture, and the art of Textile Manufacturing be taught. In 1925 the Legislature changed the name of the School to Agricultural and Mechanical College, Third District. Courses were taught only at the junior college level and the secondary level. Act 45 of the 1925 General Assembly converted the junior college to a four-year, degree-granting institution. In January, 1951, the State Legislature changed the name of the institution to Southern State College.

The institution was first accredited by the North Central Association as a high school in 1926, in 1929 as a junior college, and in 1955 as a senior college. Its primary role is that of teacher training and general education.

State College of Arkansas: 71

The Arkansas State Normal School was created by Act 317 of the 1907 General Assembly. The purpose of this institution was to train teachers. Instruction began in 1908 with 107 students and a faculty of 10. The course of study covered four years, the last two at the college level which led to the Licentiate of Instruction Degree. The first instructional departments included: Mathematics, Pedagogy, Science, Latin, Agriculture, History, English, Drawing and Penmanship, Constructive Geography, Music, and Reading. The name of the College was

changed to Arkansas State Teachers College in 1925. The name was changed again in 1967 to State College of Arkansas.

A four-year baccalaureate degree program was initiated in 1923. The Bachelor of Arts degree program for the non-teacher was established in 1929. In 1955, the College inaugurated a graduate program for elementary and secondary school teachers leading to a Master of Science degree in Education. A graduate program for Guidance Counselors was added in 1965. A new program leading to the Bachelor of Business Administration Degree was initiated in 1966.

University of Arkansas: 72

The Morrill Act passed by the Federal Congress in 1862 was the springboard for the founding of what is now the University of Arkansas. On March 27, 1871, Governor Hadley signed into law an Act which created the Arkansas Industrial University. In addition to funds received by the State, the new institution received financial assistance from the City of Fayetteville, and Washington County.

Classes opened on January 22, 1872, for the first time with eight students and a faculty of three, including President Noah P. Gates. In addition to college level instruction, the University began with a Preparatory Department which was discontinued in 1911.

A branch of the University was authorized by the General Assembly of 1873 at Pine Bluff and was the Land-Grant institution for Negroes. Since 1927 the college has been under the control of its own Board of Trustees.

Act 155 of the 1899 General Assembly changed the name of the Arkansas Industrial University to University of Arkansas. It was not until 1956 that the enrollment of the University reached 5,000.

Presently, the University is composed of several components. These components and dates of development are as follows: The divisions of the University located on the main campus include the Division of Agriculture (1904), the College of Arts and Sciences (1912), Business Administration (1937), Engineering (1912), Education (1916), the School of Law (1924), and the Graduate School (1927). The Division of Agriculture includes the College of Agriculture (1904), Home Economics (1913), the Main Agricultural Experiment Station (1888), and the Agricultural Extension Service (1913). Branch Agricultural Experiment Stations are located throughout the State.

The College of Business Administration administers the Bureau of Business and Economic Research (1943). Also located in Fayetteville are the Division of General Extension (1917) and the Summer School (1910).

The Medical Center in Little Rock was established in 1949. Included in the Medical Center are Schools of Medicine (1911), Pharmacy (1908), Nursing (1949), Medical Technology (1937), and X-Ray Technology (1948). The Medical Center provides a 450-bed Teaching Hospital (1956), an Out-Patient Clinic (1956), and a Medical Education wing (1957). Also in Little Rock is the Graduate Institute of Technology, which was established in 1957, and the Industrial Research and Extension Center, which was established in 1955 as an arm of the College of Business Administration for research.

The University of Arkansas carries out the usual programs of research and public service which are conducted by other Land-Grant institutions in the areas of agricultural extension and research. Its undergraduate programs covers most areas of study which any university of its size would be expected to offer its students. In recent years, the University has been vitally concerned with the two-fold challenge of strengthening and expanding its graduate program while at the same time maintaining and improving the quality of instruction at the undergraduate levels. Encouragement has and will continue to be given to research and experimentation with electronic and other teaching techniques which already have proven their worth at other similar institutions.

An honors program was developed several years ago in the College Arts and Sciences, which also permits participating by students in other Colleges on the campus. Graduate programs have developed rapidly since World War II. In 1965 the Doctor of Philosophy degree was offered in 20 fields, including 14 at the Fayetteville campus,

five at the Medical Center, and one at the Graduate Institute. The master's degree was offered in 53 subject areas.

The University is concerned with programs of basic and applied research. Research expenditures more than tripled over the decade from 1955 to 1965. Other than University funds which are budgeted for research, Federal and other grant funds finance research projects. On the main campus the Research Coordinator keeps research in focus for the faculty and the administration. Other agencies of the University which are responsible for much of the research conducted include the Agricultural Experiment Center, the Bureau of Business and Economic Research, and the Industrial Research and Extension Center.

Public Junior Colleges

The public community junior college movement in Arkansas is relatively new; however, the basic structure for the establishment of this important segment of higher education has already been well developed.

At the present time two public community junior colleges and one public junior college branch of Arkansas State University are in operation in the State. These institutions (with their historic development) are:

Beebe Branch — Arkansas State University: 73

Act 132 of the 1927 General Assembly established Arkansas State College — Beebe Branch, as a Junior Agricultural School. It was to offer both a two-year terminal program in Agriculture and related fields and also academic credit which could be transferred to degree-granting institutions.

In 1931 the General Assembly authorized the School to change its name from Junior Agricultural School to Junior Agricultural College. As the institution increased its emphasis on college transfer work, it was decided in 1955 by the General Assembly to change the status of the institution and make it a branch of Arkansas State College.

This change in status further emphasized a curriculum for freshman and sophomore level courses with stress on general education at the junior college level, and also includes terminal programs in the fields of Agriculture and Business. The program has expanded to include both day and night courses.

Phillips County Community Junior College: 74

Phillips County Community College has been established by the citizens of Phillips County in order that every resident of the county may have an opportunity to further his academic, occupational, and cultural education.

The College was established by a vote of the people of Phillips County as authorized by Act 560 of the 1965 General Assembly. Funds for construction of the College were provided through a bond issue approved by Phillips County voters on October 23, 1965.

Programs of study are offered in college transfer credits, technical and vocational education, and adult education. Students may qualify for the Associate Degree by fulfilling either the requirements of the general education curriculum or one of the pre-professional or technical programs. Certificates are awarded for the successful completion of vocational programs.

Qualified students may enroll in any of the three areas of the college. Registration is also permitted in more than one area at the same time according to the needs of the individual student.

Both day and evening classes are scheduled upon sufficient demand. A full-time Director of Technical and Vocational Education is employed to organize and coordinate courses and programs which are needed by the community. He also develops adult courses for which there is a sufficient demand.

Construction is in progress on a completely new and modern physical plant for the college. All buildings will be air-conditioned. Modern, well-equipped laboratory facilities for the sciences, technical and vocational programs, and languages will be included.

The new College is located on a 65-acre tract between the twin cities of Helena and West Helena.

Westark Junior College:

Westark Junior College has developed through three distinct phases. It was established as Fort Smith Junior College in 1928, an upward extension of the Fort Smith public school system, and was staffed by 10 instructors who held the master's degree, or the equivalent, chosen from the high school faculty. The superintendent of schools served as president of the institution, and the high school principal served as dean.

The College operated under this system, offering college-parallel courses only, until 1950, when it was separated from the public schools (following a taxpayer's suit in which the courts held that the use of public school district ad valorem revenue for higher education was unconstitutional) and incorporated as a private, non-profit, educational institution with its own self-perpetuating Board of Trustees.

The second phase began operation in September, 1952, when the College was moved from the high school to a 44-acre campus, located in a residential section of the city. This property, which had been used as a county farm, was obtained by the Board of Trustees on a 99-year lease with options for renewal. Two brick hospital buildings were converted to classrooms and offices, and classes began with 108 students and 10 qualified instructors.

During this phase the enrollment began a steady, rapid growth (from 108 to 1,684); and course offerings and faculty increased proportionately. Eight buildings were added to the physical plant at a cost of approximately \$850,000 including a fine arts building, a library building, a gymnasium, four vocational-technical buildings, and a small student center.

It was also during this phase that the College, with a change in administrative leadership, began to develop a comprehensive community college program, a concept of education totally unknown to the area and the State at the time. Local industrialists became interested, and, at their urging and with their economic aid and professional guidance, a vocational-technical division was established. This division has not only provided existing local industry with trained personnel, but has been an important factor in including new industries to locate in the area served by the College.

The example thus set by the College resulted in the beginnings of a statewide system of community colleges and a third phase for this institution.

Leaders from all parts of the State became enthusiastic about the concept of the community college, and undertook the difficult task of amending the Arkansas Constitution by initiative petition to make it legal for the General Assembly to authorize the creation of community junior college districts.

This Amendment (Number 52) was approved by a majority of the Arkansas electorate at the general election of November, 1964; and an enabling Act (Number 560) was passed by the General Assembly early in 1965, permitting municipalities, counties, or groups of counties to create such districts by popular referendum. This was followed by a special election, November 2, 1965, in which the electorate of Sebastian County, Arkansas, approved the creation of the Sebastian County Junior College District along with a tax levy on the real and personal property of the county. This development has brought about revolutionary changes in the College which were not possible during the second phase when the only sources of income were tuition, fees, and gifts, and the teaching loads of the faculty members were almost impossibly heavy.

Implementing the provisions of the enabling Act, the Governor appointed a nine-member Board of Trustees

for the Sebastian County Community Junior College District (subsequent vacancies will be filled by district-wide election), and the name of the institution was changed from Fort Smith Junior College to Westark Junior College.

Private Senior Colleges and Universities

The historical development of each of the private senior colleges and universities has been as follows:

Arkansas Baptist College: 76

Arkansas Baptist College was originated by the Negro Baptists in their annual convention at Hot Springs, Arkansas, August, 1884. In November of the same year the school then known as "The Baptist Institute" was opened at the Mount Zion Baptist Church in this city. It was operated until April, 1885, under the direction of Rev. J. P. Lawson, a white Baptist minister of Joplin, Missouri, but was forced to close at that time because of insufficient funds. Later during the year 1885, the Mount Pleasant Baptist Church was secured; and Rev. Harry Woodsmall, a general Missionary of the Baptist Church for the States of Arkansas, Louisiana, and Mississippi, helped with the re-organization of the plans for the continuance of the School. Articles of the association were drawn up, and the institute was legally organized and incorporated under the laws of the State, and known henceforth as the Arkansas Baptist College.

Arkansas College: 77

Arkansas College was located in Batesville in 1872 because of the community's long-time interest in education. Since the founding of the Batesville Academy in 1836 as the first educational institution to be chartered by the Arkansas Legislature, Presbyterians had taken a lead in this area.

When local citizens failed to secure the new State University following the Civil War, Presbyterians decided upon a college of their own. With Dr. Isaac J. Long, their local minister, as the first President, the institution was launched in 1872.

From its founding, Arkansas College has been a four-year, coeducational, liberal arts institution which emphasized the importance of a sound academic foundation and Christian character for careers of service. Traditionally a student's financial need would not preclude his admission if he had the prerequisite ability. Although operated by the Synod of Arkansas, Presbyterian Church in the United States, the college's faculty and student body have represented a cross section of many denominations and faiths.

During the College's first 80 years, enrollment averaged less than 150 even though for several years after World War II the influx of veterans pushed the total to more than double this figure. The original campus amounted to only one and one-half blocks. Additional property a mile away acquired in the 1920's was the site of a dormitory. After World War II a \$500,000 campaign provided a new gymnasium, a somewhat larger endowment (which still was only \$320,000), and acquisition of a 100-acre campus as the site of an adequate unfinished campus.

At this time an effort was made to consolidate Arkansas College and College of the Ozarks. When plans for the merger did not materialize in 1951, the Presbyterian Synod decided to expand Arkansas College along lines recommended by the merger consultants.

The College of the Ozarks: 78

The College of the Ozarks is an institution of higher learning in the Oklahoma-Arkansas Synod of the United Presbyterian Church of the United States of America. It was founded by Cumberland Presbyterians in 1834 as Cane Hill College at Cane Hill, Arkansas, and is the oldest institution of higher learning in Arkansas and Oklahoma. When Cane Hill College discontinued operations in 1889, the Arkansas Synod of the Cumberland Presbyterian Church established the Arkansas Cumberland College in 1891 as the successor institution. In 1906

the Cumberland Presbyterian Church was merged into the Presbyterian Church of the United States of America. In 1920 the name was changed to The College of the Ozarks. Notable progress is recorded for the institution under the leadership of Dr. Wiley Lin Hurie who served as President from 1923 to 1949. In 1953 the College was endorsed as the institution of higher learning of the Synod of Oklahoma of the Presbyterian Church in the United States of America.

Coeducation came early to The College of the Ozarks. In 1868 women were first admitted to Cane Hill College, although they had been students in a closely allied institution, Cane Hill Female Seminary, since 1840. Two women were graduated from Cane Hill College in 1872.

An important milestone in the history of the College occurred on January 1, 1960, when the Board of National Missions of the United Presbyterian Church in the United States of America assumed the ownership and operating responsibility of the College. The responsibility is now shared by this Church Board and an elected Board of Trustees.

Harding College: 79

In the fall of 1919, leading members of Churches of Christ throughout the State of Arkansas met at Conway to formulate plans for building a Christian College in Arkansas. The city of Morrilton was chosen for the establishment of Arkansas Christian College, a junior college which opened in the fall of 1922 with A. S. Croom as President. The Articles of Agreement and Incorporation of Arkansas Christian College were filed on April 13, 1923.

During the 1923-24 school year, negotiations between the board and administration of Arkansas Christian College and the board and administration of Harper College, a junior college operated by members of Churches of Christ in Harper, Kansas, led to a merger of the two institutions and the incorporation of Harding College as a senior college at Morrilton. In the fall of 1924, Harding College began its operation as a senior college. Harding College was approved as a four-year, degree-granting institution by the Arkansas State Department of Education in 1926.

During the 1933-34 school year, the campus facilities of Galloway College, for many decades a highly recognized junior college for women operated by the Methodist Church in Searcy, became vacant as the result of the merger of Galloway College with Hendrix College in Conway. Since the former Galloway plant in Searcy provided greatly expanded facilities over those in Morrilton, and since this plant could be purchased at a very nominal price, the Board of Trustees purchased the Galloway plant and moved Harding College from Morrilton to Searcy during the summer of 1934.

In the fall of 1952, Harding College began offering a graduate program in Bible leading to the Master of Arts degree. In June of 1955, Harding College began offering graduate work in education and in various subject-matter fields leading to the Master of Arts in Teaching degree. The graduate program in Bible and Religion was moved to Memphis, Tennessee, in June of 1958.

Harding College was accredited by the North Central Association of Colleges and Secondary Schools in 1954 for the granting of Bachelor of Arts and Bachelor of Science degrees. The Master of Arts in Teaching degree was initially accredited by the North Central Association in 1959 and was reaccredited in 1962 following another evaluation. The undergraduate Teacher Education program was accredited by the National Council for Accreditation of Teacher Education in May, 1963.

Hendrix College: 80

Throughout its history Hendrix has been recognized for its position of leadership and its devotion to high standards in Liberal Arts education. It has stressed its Christian heritage by actively fostering an essentially liberal spirit and a tradition of freedom of inquiry. Hendrix College has outlined its historical development as follows:

1. October 30, 1876, Central Collegiate Institute founded at Altus, Arkansas, by Rev. I. L. Burrow.
2. In 1884, Central Collegiate Institute purchased by the Arkansas Methodist Conference to memorialize the centennial of American Methodism.
3. In 1889, name changed to Hendrix College in honor of Bishop E. R. Hendrix.
4. In 1889, Galloway Women's College established at Searcy.
5. In 1890, Hendrix College moved to Conway.
6. In 1890, Arkansas Methodist College established at Arkadelphia; became Henderson College in 1904; and Henderson-Brown in 1909.
7. In 1924, Hendrix became an accredited member of the North Central Association of Colleges and Secondary Schools.
8. In 1929, Henderson-Brown and Hendrix united as Hendrix-Henderson at Conway.
9. In 1933, Hendrix-Henderson and Galloway Women's College merged at Conway, with name of Hendrix College.

John Brown University: 81

The history of the institution of higher learning now known as John Brown University began in 1919 with the filing of articles in incorporation with the Secretary of the State of Arkansas. This new institution, founded by John E. Brown, widely known evangelist and lecturer, was called Southwestern Collegiate Institute. Under the laws of the State, this all-the-year School was empowered to offer instruction in technical and vocational fields in addition to usual college subjects. The claim to uniqueness of this institution rests on the further fact that vocational training at the college level was to be required of each student. An elementary and secondary school program was operated in conjunction on the same campus.

In 1920 the name of the institution was changed to John E. Brown College, which organization carried on the same program and ideals. In the same year a companion school, the Siloam School of the Bible, was founded; and, operating largely at the junior college level, a strong and purposeful student body was built.

In 1934 amended articles of incorporation renamed the institution John Brown University, which comprised colleges known as the John E. Brown College, Siloam School of Bible, and John E. Brown Vocational College. A preparatory Department to be called the Julia A. Brown School also was provided for. The new corporation was authorized to confer such degrees as the Bachelor of Arts, the Bachelor of Science, and the Bachelor of Theology, as governed by the Arkansas State Department of Education. Also in this year, in addition to becoming a four-year, degree-granting institution, the University was empowered to offer teacher training courses which would apply toward certification by the State.

For purposes of efficiency and simplification of management, early in 1948 the administrative pattern of the University was reorganized; and the colleges forming the institution were merged into a single unit. This provided administrative machinery more appropriate to the size of the institution. In 1958, a new divisional structure was adopted, grouping the departments into five broad areas of knowledge or divisions.

Little Rock University: 82

Little Rock University traces its history to 1927, when the University of Arkansas terminated its course offerings in Little Rock. The removal of these educational opportunities from the Capitol and population center

of Arkansas prompted the establishment of a college in Little Rock. Subsequently Little Rock Junior College, under the control of the Little Rock Board of Education, began classes in a wing of the new Central High School building in September, 1927.

In 1929 Little Rock Junior College was granted accreditation by the North Central Association of Colleges and Secondary Schools. A few months later, it became the sole beneficiary of a trust established by the former Governor George W. Donaghey. In 1931, the College rented the former U. M. Rose School building.

In 1947 Raymond Rebsamen donated a beautiful 80-acre tract of land as a campus for the College. The Little Rock Junior College Foundation was created and planned a successful community drive for funds to erect buildings on the new campus in the southwestern part of Little Rock.

In 1957 a four-year program was inaugurated after several years of study. The name was changed to Little Rock University and control of the University passed to its own Board of Trustees. In 1960 accreditation as a four-year College was received by the North Central Association of Colleges and Secondary Schools.

Ouachita Baptist University: 83

Ouachita Baptist College had its corporate beginning on October 29, 1885, when the Arkansas Baptist State Convention in session at Hope, Arkansas, appointed a Board of Trustees "for the purpose of organizing and founding such a college....". On December 24, 1885, the Board met in Little Rock to receive bids for the location of the College. Four towns submitted bids. At the next meeting of the Board on April 9, 1886, bids from four additional towns were submitted. On the seventy-second ballot, Arkadelphia was selected. Dr. J. W. Conger was elected President on June 22, 1886, with instructions to employ a faculty and otherwise organize the College. On September 6, 1886, the College opened for classes. It was organized in four departments—Primary, Intermediate, Preparatory, and Collegiate. The last department had seven "schools"—Latin; Greek; Mathematics; Natural Science, Mental Science, and Christian Ethics; English; History; and Modern Languages (French and German). It offered four degrees and a secondary diploma. It was chartered March 23, 1887, by authority of the Governor, the Superintendent of Public Instruction, and the Secretary of State.

By 1888, "extra schools" were added—Theology, Music, Education, Art, Commercial, Military and "Normal Class" (education). In 1892, by a resolution, the Arkansas Baptist State Convention settled the issue that the College would be coeducational. In 1893, the Primary and Intermediate Departments were discontinued. In 1895, the institution was reorganized into four "schools"—Preparatory, Collegiate, Conservatory of Fine Arts, and Business College. In 1898, the "School" of Pedagogy was added. The Master of Arts was made a graduate degree. By 1900 there were 11 "schools" in the Collegiate Department. The Bachelor of Arts and Bachelor of Literature were the only undergraduate degrees offered in 1902. From 1902 through 1912, Ouachita became a member of a system of Affiliated Baptist Colleges and Academies. The major change concerning Ouachita was the provision that its Board of Trustees should be elected by the Arkansas Baptist State Convention. The original Board was self-perpetuating. In 1912, the College was organized into 12 "departments" instead of the former "schools". During that period, the financial problems eclipsed all others. No significant developments were possible.

In 1913 the affiliation was dissolved; Ouachita offered four bachelor degrees—Bachelor of Arts, Bachelor of Science, Bachelor of Mathematics, and Bachelor of Literature—and Master of Arts degree. It also granted diplomas in seven areas including a preparatory diploma. That department was discontinued in 1916, although remedial courses were still offered until the spring of 1920. In 1914, an amended charter was adopted.

That charter brought the College under operative control of the Arkansas Baptist State Convention by

revising Article Five of the original Articles on Incorporation to provide that a Board of Trustees of members be elected annually by the Convention, eight members elected each year to a three-year term.

On July 24, 1958, the Board of Trustees of Ouachita authorized a program of graduate studies leading to the Master of Arts degree.

Ouachita was reorganized in 1965 into a University of three schools—School of Arts and Sciences, School of Nursing, and Graduate School.

Philander Smith College: 84

Philander Smith College, officially founded in 1877, is the result of one of the early attempts to make education available to freedmen west of the Mississippi River. The forerunner of the College was Walden Seminary.

In 1876, the General Conference of the Methodist Episcopal Church authorized the creation of an annual conference for Negro preachers in the State of Arkansas with the power to promote schools. The new body was named the Little Rock Annual Conference (now the Southwest Annual Conference). In 1877 this annual conference designated Walden Seminary as its official educational institution. The seminary was located at Eighth Street and Broadway in the Wesley Chapel Methodist Church.

The Seminary was moved from the Eighth Street and Broadway site on January 1, 1879, to Tenth and Center Streets in a suite of rooms on the second floor of Kendrick Hall.

In 1882, the name of Walden Seminary was changed to Philander Smith College. A new site for the school was purchased at Eleventh and Izard Streets.

Philander Smith was chartered as four-year college on March 3, 1883. The first baccalaureate degree was conferred in 1888.

The primary grades were dropped in 1924 and the high school department was dropped in 1936. In July, 1948, the site comprised one city block on which were located an administration building containing offices, classrooms, a library, a gymnasium, and a chemistry laboratory. On March 30, 1949, after an extensive program of academic improvement, Philander Smith College was fully accredited by the North Central Association of Colleges and Secondary Schools.

An academic study in 1957, revealed that a financial outlay of \$3,500,000 was needed for sustaining a high quality undergraduate educational program at the College. On March 12, 1958, a \$3,500,000 Capital Funds Campaign was officially launched. Of this amount it was estimated that \$1,500,000 would be needed to purchase new land and to construct and furnish new buildings. The remaining \$2,000,000 would be needed to enlarge the endowment of the College.

In 1958, the College purchased two and one-half city blocks of Urban Renewal property adjacent to the campus for further expansion of the physical plant. In 1959, construction was begun on the M. L. Harris Library and Fine Arts Center. In 1960, the College took steps to acquire six additional city blocks of Urban Renewal property adjacent to the campus to enlarge the main campus to 12 city blocks or approximately 30 acres.

The College, through Village Square, Inc., constructed and placed in use in 1963 a \$3,000,000 housing project and shopping center. Village Square comprises five three-story modern brick buildings containing 240

apartments and one two-story building which serves as a shopping center for the area. These buildings cover approximately three city blocks south of the main campus.

Dr. Ernest Thomas Dixon, Jr., Philander Smith's sixth president, took office January 1, 1965. Under his leadership 10-year projection plans for the College are now in process to strengthen the academic program and construct additional buildings.

Private Junior Colleges

At the present time four private junior colleges are in operation in the State. The historical development for these colleges has been as follows:

Central Baptist College: 85

Central Baptist College operated under the name Conway Baptist College from September, 1952, until November 20, 1961.

Central Baptist College is the outgrowth of a move made by the Arkansas Missionary Baptist Association at its organizational meeting in Little Rock, Arkansas, November 14-15, 1950. At this meeting, in keeping with the Constitutional Article on Christian Education, a committee consisting of 15 members was selected and authorized to make arrangements for the founding of school.

As a temporary expedient, the Arkansas Baptist Extension School was established in Little Rock. In the meantime, the committee made a diligent investigation of various proposals for a permanent location of a school to be designated as a college and Bible training center.

As a result of its survey, the committee recommended to the Association at its next session (Warren, Arkansas, November 13-14, 1951) that the property of the former Central College, Conway, Arkansas, be purchased and that a school with a junior college status be opened there in September, 1952. The recommendation was unanimously adopted by the messengers from cooperating churches, and steps were taken immediately to raise the necessary funds for the purchase of the property. The fund-raising campaign opened at the Warren session and was consummated on September 1, 1952, at which time title to the property was acquired by the Trustees for the churches of the Arkansas Missionary Baptist Association.

The School has operated on a junior college level since its inception. It is approved by the Arkansas State Department and holds membership in Council of North Central Junior Colleges, the American Association of Junior Colleges, and the National Commission on Accreditation. It is also approved by the Veterans Administration for the training of veterans. A junior college will be maintained until the school's progress makes it possible to replace it with a senior college in the field of Liberal Arts.

Crowley's Ridge Junior College: 86

Crowley's Ridge Junior College, a standard Liberal Arts Christian junior college, is an extension of a program of Christian education which began in 1953, with the establishment of Crowley's Ridge Academy. The realization that religious training by our colleges and in the public schools was becoming illegal caused Christian

parents in Northwest Arkansas to build a school where their children could study the Word of God daily. Crowley's Ridge Academy has since grown into a fine educational institution offering Bible training to nearly 350 youngsters from kindergarten through the 12th grade. Many families have moved into the area from distant places to take advantage of its unique opportunities. In 1964, in order to bring Christian education at the junior college level to more Christian youth, Crowley's Ridge College was established.

Shorter College: 87

Shorter College was founded by the African-Methodist-Episcopal Church. In November, 1885, the Arkansas Conference passed resolutions in favor of a joint commission on church schools. In May, 1886, they established the institution "In the name of God, without a dollar." The new school was named Bethel University and had its first session in the basement of Bethel African-Methodist-Episcopal Church, Ninth and Broadway, Little Rock, September 15, 1886.

Shorter College has outlined its historical development as follows:

1. On September 23, 1891, Bethel Institute began the fifth session in its history and the first of its location in Arkadelphia, where the Reverend J. I. Lowe, acting for the people in the Arkadelphia District, had pledged \$3,000 for it.
2. On December, 1892, the name was changed from Bethel Institute to Shorter University in honor of Bishop James Alexander Shorter, who on November 19, 1868, organized the African-Methodist-Episcopal Church in Arkansas.
3. On August 14, 1903, an amendment to the charter was recorded changing the name to Shorter College.
4. In 1903, Tyree Hall was erected.
5. In May, 1955, by action of the Board of Trustees, Shorter College began operation as a two-year college.

Southern Baptist College: 88

Southern Baptist College was founded at Pocahontas, Arkansas, in 1941. The founders believed that a need existed for another institution of higher learning in the area. Within a 100-mile radius only two Arkansas institutions existed, Arkansas State College in Jonesboro, Arkansas, and Arkansas College in Batesville, Arkansas. No Baptist institution existed in northern Arkansas or southeastern Missouri.

Approximately 500 rural Baptist Churches were in the area, many of them served by pastors who had little or no formal training beyond high school. One of the purposes for the founding of Southern Baptist College was to make available educational opportunities for the ministers.

Too, the founder recognized the needs of the non-ministerial students; and accordingly, structured a Liberal Arts program in conjunction with the course of study for the ministers. Steady progress was made until 1946, when a severe loss temporarily hurt the operation of the college. On December 26, 1946, the administration building burned. Housing Facility had been acquired previously at the former Marine Corps Air Facility near Walnut Ridge, Arkansas; and the College was moved there in time to re-open on January 6, 1947. Operation of the institution is still at this site.

In 1958 the board and faculty instituted a program of securing full regional accreditation. In 1960 the institution was admitted to "candidate for accreditation status" by the North Central Association of Colleges and Secondary Schools. Full accreditation was given the College in 1963 covering all work after September, 1962.

CHAPTER VI

PRESENT AND PROJECTED PROGRAMS AND SERVICES

Higher education in Arkansas today, as in all the Nation, from the junior college to the universities, is being examined closely by educators, legislators, and lay people to ensure that the educational system accomplishes its goal of producing well-educated citizens. Good reasons exist for this scrutiny of the educational system. Thoughtful Arkansans realize that the State's future is dependent in large measures on an educational system is of high quality and which meets the needs of the people.

Arkansas public and private colleges and universities offer citizens of the State an opportunity for a broad variety of higher educational programs and services.

In general, the various programs may be grouped in three major categories: programs of less than baccalaureate level, bachelor's level programs, and graduate and professional programs.

Present and Projected Programs of Less Than Baccalaureate Level in Public Senior Colleges and Universities:

In many states the majority of these programs are offered in the public community junior colleges. Due in part to the fact that Arkansas does not have, as yet, a highly developed system of public community junior colleges, a number of these programs are currently being offered by the senior colleges and universities.

A tabulation of the terminal programs offered by the public four-year colleges and universities in the State is presented in Table XXIV. From an analysis of Table XXIV, it may be observed that with the exception of the State College of Arkansas, all the public four-year colleges and universities are offering terminal programs of an occupational nature. The number of programs offered by the various institutions ranges from one program at Arkansas Agricultural and Mechanical College, Henderson State College, and the University of Arkansas to 16 programs at Arkansas Agricultural, Mechanical and Normal College. The Committee on Four and Five-Year Undergraduate Programs conducted a survey of terminal programs offered by four-year institutions; the survey findings are summarized below: 89

At the present time, public senior colleges and universities in Arkansas offering four and five-year undergraduate programs offer a very limited number of one or two-year terminal programs of an occupational nature. Representatives of these institutions feel there is a need for persons with skills provided by programs of this type and that there is a demand from students for this type program. However, the four and five-year institutions should not offer these programs unless they fit into the overall program and aims of the respective institutions. This type program should not be permitted to curtail the regular baccalaureate program, and only those courses that are of high quality should be offered.

Most institutions offer some pre-professional programs, and at least seven institutions offer a program in Secretarial Science. These programs, however, afford credit that may be applied toward a bachelor's degree and should not be considered terminal in nature. Terminal programs offered include an Associated Degree in Nursing, Industrial Technology, Printing, and Medical Technology.

Five institutions indicated that the programs in Secretarial Science had been or would be discontinued while two institutions have recently discontinued or plan to discontinue programs in Home Economics. Other programs to be discontinued include Agriculture, pre-Engineering, pre-Nursing, and General Clerical.

Any programs of this nature that are to be initiated will probably have to be offered by current faculty or the institution must receive funds specifically for new program. Programs of a terminal nature planned for the future include:

TABLE XXIV

**PROGRAMS OF LESS THAN BACCALAUREATE DEGREE LEVEL OFFERED
IN PUBLIC FOUR-YEAR COLLEGES AND UNIVERSITIES, 1966-67**

Terminal Program	AM&N	A&M	APC	ASU	HSC	SSC	SC of A	U of A	U of A Med. Center
Agricultural Business & Industry	x								
Agricultural Machinery	x								
Agriculture			x						
Auto Body Repair	x								
Automotive Mechanics	x								
Brickmasonry	x								
Carpentry	x								
Cosmetology	x								
Drawing & Design	x								
Electricity	x								
Engineering			x						
Home Economics			x						
Industrial Technology						x			
Machine Shop	x								
Medical Technology				x					
Ornamental Horticulture	x								
Painting & Decorating	x								
Practical Nursing	x								
Printing				x					
Secretarial Science	x	x	x	x	x	x		x	
Tailoring	x								
Welding	x								
X-Ray Technology									x

New Programs**Number of Institutions Reporting**

Associate Degree in Nursing	2
Computer Math	1
Data Processing	4
Farm Management	1

Present and Projected Programs of Less Than Baccalaureate Level in Private Senior Colleges and Universities:

On the basis of the results of a survey of terminal programs offered in private four-year colleges and universities, it appears that only two private institutions in the State are offering programs of a terminal nature. Little Rock University has a program in Nursing and Harding College has terminal programs in Nursing, Secretarial Science, Engineering, Pharmacy, Medical Technology, Dental Technology, and Optometry. In general, the private four-year colleges and universities do not anticipate an increase in terminal programs in the future.

Programs of Less Than Baccalaureate Level Presently Offered in Public Junior Colleges:

In states having a highly developed system of public community junior colleges most of the programs of less than baccalaureate level are offered in these institutions. The typical pattern is for the community junior colleges to offer college transfer programs for students who wish to transfer to senior colleges and universities; programs in technical and vocational education (occupational education) for students who desire employment at the end of the planned course of study or for individuals who are presently employed and wish to upgrade themselves; programs and courses in adult education which will satisfy a broad range of educational needs and interests; and to offer programs of community service. It is anticipated that as the Arkansas system of public community junior colleges develops these institutions will provide most, if not all, programs of less than the baccalaureate level needed in the State.

At present, Arkansas' educational needs in this important area are being served by only three public junior colleges. These institutions with their current programs are:

Arkansas State University - Beebe Branch: 90

At the present time, the offerings of the Beebe Branch include both terminal programs of an occupational nature and the basic education curriculum.

The academic program at the Beebe Branch is designed to achieve the aims of the first two years of a four-year state college or university program for students who wish to transfer to a senior institution and for students who desire two years of academic work but do not intend to work toward a baccalaureate degree.

In addition to the general education or academic program, the Beebe Branch also offers transfer and terminal programs in the fields of Secretarial Science, Agriculture, Electronics, and Industrial Education. Other terminal programs are offered for students who wish to prepare for employment in a minimum of one or two years and who do not wish to pursue work in those areas leading to a Bachelor's Degree. These terminal programs include secretarial training and stenographic training which are certificated programs. Beebe Branch also offers public service programs in accordance with the interest and demand of the local and adjoining communities.

Phillips County Community Junior College: 91

The permanent physical plant for this institution is currently under construction and will probably be occupied in the summer or fall of 1968. At the present time, the College occupies space in a former Naval Reserve

Building in Helena. Phillips County Community Junior College was established with the understanding that it would be developed as a comprehensive community college.

Programs of study are offered in college transfer credit, technical and vocational, and adult education. Students may qualify for the Associate Degree by fulfilling either the requirements of the general education curriculum or one of the occupational programs. Occupational education programs are offered as both associate degree programs or certificate programs.

The two-year associate degree occupational programs are designed to provide technical knowledge and skills necessary for successful employment at a semi-professional level within various fields of business and industry.

Associate degree occupational programs presently offered by Phillips County Community Junior College include Drafting Technology, Secretarial Science, and Business Management. During the 1968 school year, similar programs will also be offered in Data Processing and Associate Degree Nursing.

In an effort to serve the total community and its wide range of educational needs, the College is developing a selected number of one-year certificate programs. These selected programs are to be preparatory in nature and designed for those students wishing to further their education within a specific occupational area for future employment.

The certificate programs operate within the total college framework. From these occupational areas a number of specific short-term courses are offered as evening classes for those persons wishing to elevate themselves in their present field of work.

Adult education courses are provided through a community service program. These courses are scheduled based upon interest evidenced by the community.

Westark Community Junior College: 92

The programs offered at Westark Junior College provide services in four categories: (1) two-year college transfer programs, (2) two-year college terminal programs, (3) adult and continuing education programs, and (4) community service programs. It awards one degree, the Associate of Arts, and a number of certificates which acknowledge successful completion of specified requirements; in addition, it provides opportunities for those individuals who wish to pursue their learning not for a degree or a certificate but for their personal satisfaction.

The Associate of Arts Degree is offered in seven specific areas: Business, Distributive Education, Education, Liberal Arts, Fine Arts, Science and Engineering, and Technology. The curricula and requirements for each area have been planned to satisfy two basic types of students: (1) those who intend to transfer to other institutions and (2) those who intend to terminate formal education at the end of two years of college work. The two degree programs are generally classified as transfer and terminal.

The transfer program is basically planned as standard freshman/sophomore work that is normally transferable to senior institutions. Students in this program are encouraged to plan programs of study that are acceptable to the institution to which they plan to transfer. Courses in the academic program are designed to be transferable; however, they are open to students who wish to continue their education, for whatever purpose, and have completed the prerequisites. Insofar as it is practiceable to do so, the courses are offered in both day classes and evening classes so that they may be available to anyone who is interested.

The terminal program is designed for students pursuing occupational objectives that have a requirement of two years of college work or less. A number of special courses have been devised primarily for this program. These include courses in English, Mathematics, Physical Education, and Psychology, specially planned to meet special needs, as well as courses in Distributive Education and various technical fields. Students receive the Associate of Arts in Technology upon completion of the institution's requirements, including a minimum of 30

semester hours in the major technical fields of study. Technical fields presently taught include Auto Body Repair, Auto Mechanics, Drafting, Electronics, and Machine Shop. The Associate of Arts in Distributive Education is awarded students completing the required distributive education curricula.

The College participates with the Employment Security Division and the Arkansas Department of Vocational Education in the training program under the Manpower Development and Training Act, Public Law 87-415. Classes under this program are recruited by the Employment Security Division and comply only with its admission requirements. Supervision is by the State Department of Vocational Education and local supervisors. Students receive up to 2,000 clock hours of instruction in periods ranging from six months to one year. Upon successful completion of the training period, students receive a certificate of completion from the College. Programs in Auto Body Repair, Auto Mechanics, Dry Cleaning, Machine Shop, Stenography, and Sheet Metal Fabrication are presently in progress.

The Associate Degree programs in Distributive Education and Technology are financed in the same way as the transfer program except that the State Department of Vocational Education reimburses 50 per cent of operating expenses of all classes in the technical division that qualify under the State Plan for Administration of the Vocational Education Act of 1963, Public Law 88-210. All classes under the Manpower Development and Training Act are 90 per cent funded for all expense. Equipment for this program remains the property of the United States Government; however, it may be used in other programs when not required for Manpower Development and Training Act classes. As the programs are phased out and this equipment is removed, funds for new equipment must be budgeted.

The College offers an extensive community service program, which, by definition, it intended to provide educational service to the people of the community regardless of age or previous education. Seminars and courses of study varying from one day to 16 weeks are offered to professional, vocational, and civic groups to provide opportunities to better occupational status, raised the cultural level, develop community leadership, and form an educational climate in which citizens can develop their potentialities. Courses have been conducted in various fields of study and certificates are awarded for satisfactory completion of the separate requirements. The programs are self supporting with enrollees paying a fee which is determined by the administrative and instructional cost.

Programs of Less Than Baccalaureate Degree Level in Private Junior Colleges

The majority of Arkansas' private junior colleges are church related institutions whose major functions are to provide two years of general education for students who desire only two years of college or who intend to transfer to a senior institution on completion of the junior college program; and to train personnel in the field of religion for the denominational group with which the particular college is affiliated. Unlike the public community junior colleges, very few of the private junior colleges offer vocational and technical training, other than a few limited fields, nor do they anticipate the development of such programs. The four private junior colleges of the State and their programs are:

Central Baptist College: 93

Central Baptist College offers an Associate of Arts Degree upon satisfactory completion of the first two years of college work. General Education is offered in addition to work in Music, Business, Accounting, and Stenography.

Central Baptist also awards a Bachelor of Arts Degree in Bible and a Bachelor of Science Degree in Religious Education.

Crowley's Ridge College: 94

The curriculum at Crowley's Ridge College is basically a two-year Liberal Arts and General Education

program. The College offers work in the following divisions: Division of Humanities; Division of Bible and Christian Education; Division of Natural Sciences; and the Division of Social Sciences. In addition to these programs, Crowley's Ridge College also operates an extension center in cooperation with the Office of Economic Opportunity.

The College confers the Associate of Arts Degree upon successful completion of two years of college work.

Shorter Junior College: 95

Shorter Junior College offers a two-year terminal or transfer program in General Education. In addition to the regular two-year General Education program, the College offers religious education through its Department of Theology.

Southern Baptist College: 96

Southern Baptist College confers the Associate of Arts or the Associate of Science Degree to students who successfully complete two years of work at the institution. Courses of instruction are offered in Art, Bible, Religious Education, Business, Education, Psychology, English, Speech, Health and Physical Education, Mathematics, Music, Science, Philosophy, and Social Sciences.

Other Programs Beyond the High School But Less Than Baccalaureate Level:

Arkansas has a statewide system of area Vocational-Technical Schools in which vocational-technical programs (occupational beyond the high school level but less than baccalaureate level are being offered. Even though most of these programs are at a strict vocational level, some academic course work beyond the high school level is being offered.

As the State system of community junior colleges develops, the area Vocational-Technical Schools should, where practical, become a part of the community junior college established in the area.

The area Vocational-Technical Schools with their locations and programs are as follows (fall, 1967): 97

ARKANSAS AGRICULTURAL, MECHANICAL, AND NORMAL COLLEGE - VOCATIONAL ARTS DEPARTMENT, Pine Bluff, Arkansas

Appliance	Machnie Shop
Auto Mechanics	Masonry
Body Repair	Practical Nursing
Carpentry	Radio and Television Service
Cosmetology	Tailoring
Drafting	Welding

ARKANSAS VALLEY VOCATIONAL - TECHNICAL SCHOOL, Ozark, Arkansas

Air Conditioning	Laboratory Technician for
Auto Mechanics	Food Processing Technology
Body Repair	Office Practice
Cosmetology	Radio and Television Service
	Welding

COTTON BOLL VOCATIONAL - TECHNICAL SCHOOL, Burdette, Arkansas

Air Conditioning	Office Practice
Auto Mechanics	Sheet Metal

Drafting (Mechanical)
Machine Shop

Welding

CROWLEY'S RIDGE VOCATIONAL - TECHNICAL SCHOOL, Forrest City, Arkansas

Auto Mechanics
Drafting
Electronics

Machine Shop
Office Practice
Practical Nursing
Welding

DELTA VOCATIONAL - TECHNICAL SCHOOL, Marked Tree, Arkansas

Agriculture Technology
Appliance Service
Cosmetology
Farm Equipment Mechanics

Office Practice
Practical Nursing
Welding

FOOTHILLS VOCATIONAL - TECHNICAL SCHOOL, Searcy, Arkansas

Auto Mechanics
Drafting
Electric Motors and Controls
Farm Equipment and Diesel
Mechanics

Machine Shop
Office Practice
Practical Nursing
Welding

LITTLE ROCK VOCATIONAL AND ADULT SCHOOL, Little Rock, Arkansas

Appliance Repair
Business Education
Computer Programming
Data Processing

Drafting (Technical)
Furniture Repair and
Upholstery
Practical Nursing

OIL BELT VOCATIONAL - TECHNICAL SCHOOL, El Dorado, Arkansas

Appliance Service
Auto Mechanics
Data Processing
Drafting

Machine Shop
Office Practice
Practical Nursing
Welding

PETIT JEAN VOCATIONAL - TECHNICAL SCHOOL, Morrilton, Arkansas

Appliance Service
Auto Mechanics
Carpentry
Data Processing
Diesel Mechancis
Drafting and Surveying
Horticulture and Landscaping

Heavy Equipment Operation
Machine Shop
Office Practice
Practical Nursing
Printing
Welding

PHILLIPS COUNTY COMMUNITY COLLEGE, Helena, Arkansas

Automotive Mechanics
Business Data Processing
Drafting (Mechanical)

Electricity
Electronics
Nursing

PINES VOCATIONAL-TECHNICAL SCHOOL, Pine Bluff, Arkansas

Auto Mechanics	Communications
Body Repair	Industrial
Cabinet Making	Farm Equipment Mechanics
Cooking	Machine Shop
Drafting	Office Practice
Architectural	Bookkeeping
Mechanical	Secretarial
Electronics	Practical Nursing
Radio and Television	Welding

RED RIVER VOCATIONAL-TECHNICAL SCHOOL, Hope, Arkansas

Diesel and Truck Mechanics	Office Practice
Forestry	Practical Nursing
Heavy Equipment Operation	Welding
Machine Shop	

SOUTHWEST VOCATIONAL - TECHNICAL INSTITUTE, East Camden, Arkansas

Advertising Art	Food Preparation and
Architectural Drafting	Management
Aviation Mechanics	Industrial Chemical Technology
Building Construction	Mechanical Drafting and
Technology	Design
Data Processing	Mechanical Technology
Electronics	Practical Nursing
	Instrumentation

TWIN LAKES VOCATIONAL - TECHNICAL SCHOOL, Harrison, Arkansas

Appliance Service	Machine Shop
Auto Mechanics	Office Practice
Body Repair	Practical Nursing
Cooking	Radio and Television Service
	Woodworking

WESTARK JUNIOR COLLEGE, Fort Smith, Arkansas

Auto Mechanics	Electronics
Body Repair	Machine Shop
Drafting	Sheet Metal Fabrication

A Projected State System of Public Comprehensive Community Junior Colleges:

One issue on which there is almost unanimous agreement among the various study committees and the consultants is the need for a statewide system of comprehensive community junior colleges designed to offer commuting students higher educational programs in vocational, technical, continuing education, and freshman/sophomore offerings for transfer credit in baccalaureate degree programs. It is the consensus of nearly everyone who has worked with the study that it is vital that a sufficient number of these institutions be established to serve the needs of the State and that the programs of each college be oriented to the particular educational needs of the geographical area to be served by the college, and that the college transfer curricula of all these institutions be planned and operated in a manner which will insure that student transferability into

senior institutions.

The consultants and the Coordinating Committee foresee three serious problems in the development and effective operation of the State system of community junior colleges. The most serious of these is the parallel development of a State system of area vocational schools under the State Department of Education and the development of a State system of comprehensive community junior colleges under the Commission on Coordination of Higher Educational Finance. It is agreed that unless these two developments are coordinated closely and merged into a single operation as the two systems develop that Arkansas will have a real crisis on its hands within a few years. The consultants conclude that the community junior colleges are a part of higher education and from their observations of various plans in operation, they have come to the firm conclusion that comprehensive plans for post-high school education in Arkansas must include junior colleges and vocational-technical schools.

Another disruptive factor which may eventually emerge will be local pressure to convert one or more of the community colleges into four-year undergraduate institutions. However, the Arkansas Legislature anticipated this problem and included in the Act safeguards against this possibility. The present legislation covering the development of community junior colleges prohibits this kind of development. It is recommended that this prohibition remain a part of the law concerning the development of these institutions.

The third disruptive factor is the present inability of the State to adequately finance the development of a statewide system of comprehensive community junior colleges. However, it is felt that the current financial conditions of the State should not affect the long-range plans for such a system. The immediate effects of insufficient revenue for developing this system might will be an extension of the timetable required for the development of these institutions rather than a postponement of the development and approval of long-range plans for achieving these objectives. This means that steps toward the realization of the goal of having comprehensive community junior college within daily commuting distance of students in all areas of the State could be taken as rapidly as financial conditions permit. The full realization of this ideal may well take 10 to 15 years unless the State is able to increase its share of the cost of establishing and operating these institutions.

The Committee on Junior College and Vocational-Technical Programs has developed an ideal plan and some alternatives for the development of a system of comprehensive community junior colleges and the coordination of the programs of the institutions with the area Vocational-Technical Schools and with other institutions of higher learning in the State. The Committee recommended that: 98

1. There should be established a statewide system of public comprehensive community junior colleges offering higher educational opportunities (vocational, technical, continuing education, and college transfer) of two years or less duration and desirably available within commuting distance of all citizens of the State and further that these institutions should be developed as rapidly as the State's financial resources will permit.
2. Each community junior college in Arkansas should offer, as soon as it is economically feasible, broad program areas of education for transfer to the bachelor's degree program (university parallel), occupational education, (vocational-technical), and general education, continuing education, community services, and guidance and counseling.
3. Each community junior college should have an "open-door" admissions policy. Any high school graduate, or any person over 18 years of age who seems capable of profiting by the instruction offered, should be eligible for admission.
4. Student fees at community junior colleges should be kept to a minimum; it would be desirable to provide a more flexible determination of the amount of State funds for the general operation of each college. Operating funds shall be allocated on a sliding scale, from 50 per cent of the total operating budget as approved by the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board, to 33-1/3 per cent, the percentage to depend upon the enrollment of the

institution, and to some extent the ability of the district to support a community junior college. The percentage should be high for beginning institutions and decreasing as the enrollment increases.

5. The community junior college system at the State level should remain under the direction of the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board as provided within the legal framework of Act 404 of 1967.
6. An adequate number of staff members should be added to the Commission on Coordination of Higher Educational Finance with sole responsibility for implementation of the community junior college movement. These staff members should be organized as a specific community junior college unit working within the Commission.
7. When a community junior college is established in an area where a State area Vocational-Technical School now exists, the two should be combined into a comprehensive community junior college.
8. Steps should be taken to explore the possibility of closer cooperation between the State Vocational Board and the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board.
9. Act 404, as amended by the 1967 General Assembly, should be amended further to provide clearly for the replacement of members of the local initial board and to permit candidates for board membership to run on a nonpartisan basis; and further, to permit counties to pay out-of-district tuition for its students who are attending the community junior college in an established district.
10. Each community junior college should offer evening and summer courses.
11. In order to improve the State system of community junior colleges, the State colleges and universities should offer graduate programs for the preparation of community junior college instructors and administrators.
12. Each college should provide for all students the necessary guidance counseling to enable each one to know and accept his strengths and limitations and to select realistic goals in choosing the programs most suited to him in light of objective information and his personal situation.
13. A committee composed of both junior college and senior college representatives should be established to study problems of articulation which may arise as the junior college system develops.
14. It is desirable that the president of each of these institutions possess a Doctor's Degree and be committed to the educational purpose of the comprehensive junior college. The local board shall consult with and have the advice of the Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board in the selection and employment of a president.
15. The Commission on Coordination of Higher Educational Finance acting in its role as the State Community Junior College Board should endorse the desirability of establishing community junior colleges in a statewide district system identified in the three plans as outlined in the report of the Committee on Junior Colleges and Vocational-Technical Programs, recognizing that the districts may vary widely from those specifically recommended in the plans.

The consultants and members of the Coordinating Committee are in general agreement with the foregoing recommendations and urge that they be implemented as rapidly as it is feasible to do so. In addition it is recommended that the report and recommendations of the Committee on Junior College and Vocational-Technical Programs serve as a guide to the Commission on Coordination of Higher Educational Finance and the Legislature in planning for the future development of the State system of comprehensive public junior colleges.

Present and Projected Four and Five-Year Undergraduate Programs:

The Arkansas higher education needs for four and five-year undergraduate programs are being served by six public colleges, two State universities, six private colleges, and three private universities. These institutions offer citizens of the State an opportunity for a broad variety of degree programs.

This section of the study is designed to present a general description of the total undergraduate program in Arkansas. The data presented here are in quantitative rather than qualitative form. The best available quantitative data on instructional programs are the data on programs offered and degrees granted as presented in the individual institutional "Role and Scope" studies and analyzed by the Committee on Four and Five-Year Undergraduate Programs. For reasons of convenience, these programs have been grouped by type of institutional control in which the programs are offered.

Present and Projected Four and Five-Year Undergraduate Programs in Public Senior Colleges and Universities: 99

The Committee on Four and Five-Year Undergraduate Programs presented its analysis of the present and projected programs under the headings of present and future programs, special programs, consideration of programs, student admission and retention, and faculty recruitment and retention.

Present and Projected Programs:

The Commission on Coordination of Higher Educational Finance requested each institution of higher education in Arkansas to prepare a study of its role and scope to submit to the Commission in the fall of 1966. In the fall of 1967, the Commission directed that the institutions revise their reports and extend their projections to the year 1980-81. The Committee on Four and Five-Year Undergraduate Programs of the Comprehensive Study of Higher Education in Arkansas extracted from the role and scope studies the data presented in Tables XXV and XXVI in Appendix III.

Since each institution used its own organizational pattern and major area titles in preparing its role and scope study, some interpretations and adjustments of the original data were necessary in order to make Tables XXV and XXVI more meaningful. For example, some institutions used the title "Government" for a major or offering, while other institutions used the title "Political Science." Some institutions listed all their secondary teacher education programs under Education, while other listed the programs for training secondary teachers under the academic areas in which the students were preparing to teach.

Table XXV in Appendix III contains a tabulation of the number of baccalaureate degrees granted in each academic area by State supported senior colleges and universities in Arkansas for the five-year period 1962-63 through 1966-67. A combined total of 111 different majors leading to the baccalaureate degree were offered by the nine State supported institutions in Arkansas during the five-year period. A summary of the baccalaureate degrees offered and the per cent each area produced of the total is presented in Table XXVII.

The major fields of study leading to the baccalaureate degree offered by State supported institutions of higher learning in Arkansas in 1966-67 are shown in Table XXVI in Appendix III. Two major fields of study were offered during the 1966-67 year, and five new major areas were added during this year. The major areas added were Basic Science Education, Speech Pathology, Marketing and Management, Nutrition and Ruminant Nutrition.

Table XXVIII in Appendix III contains a tabulation of the baccalaureate degree programs projected for the State supported senior colleges and universities in Arkansas from 1968 through 1981. The nine institutions have proposed the addition of 80 programs leading to the baccalaureate degree during this 13-year period. Twenty-five of the 80 programs are new programs never before offered by the institutions of higher learning in Arkansas.

TABLE XXVII

**BACCALAUREATE DEGREES GRANTED BY MAJOR ARTS AND
PERCENT EACH AREA IS OF TOTAL DEGREES GRANTED
ARKANSAS PUBLIC COLLEGES AND UNIVERSITIES, 1962-1967**

Program Area	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Med. Ctr.	Total
Liberal Arts	472	119	272	566	439	133	388	1,159		3,548
% of Total	22.67	12.00	24.37	18.71	30.13	14.32	21.89	20.35		20.21
Science	416	142	231	422	256	77	334	526		2,404
% of Total	19.98	14.31	20.69	13.96	17.57	8.29	18.85	9.23		13.70
Fine Arts	93	14	62	98	106	11	53	99		536
% of Total	4.47	1.41	5.56	3.24	7.27	1.18	2.99	1.75		3.06
Education	695	314	270	1,049	533	407	682	755		4,705
% of Total	33.38	31.65	24.19	34.69	36.59	43.81	38.49	13.25		26.80
Business Administration	189	240	265	586	48	290	173	1,440		3,231
% of Total	9.08	24.20	23.75	19.38	3.29	31.22	9.77	25.29		18.41
Home Economics	142	0	9	0	75	0	142	169		537
% of Total	6.82		.81		5.15		8.10	2.97		3.06
Agriculture	72	13	0	271	0	4	0	258		618
% of Total	3.46	1.31		8.96		.43		4.53		3.52
Engineering								884		884
% of Total								15.52		5.03
Industrial Education		39								39
% of Total		3.93								.22
Vocational Training	3									3
% of Total	.14									.02
Medicine, Nursing, Pharmacy			7			7			487	501
% of Total			.63			.75			100.00	2.85
Law								247		247
% of Total								4.34		1.41
Architecture								158		158
% of Total								2.77		.90
Forestry		111								111
% of Total		11.19								.63
Radio, Journalism, Printing				32						32
% of Total				1.06						.18
GRAND TOTAL	2,082	992	1,116	3,024	1,457	929	1,772	5,695	487	17,554

The data presented in Tables XXV and XXVI in Appendix III reveal that in the past, there has not been an extensive duplication of undergraduate programs in the public institutions of higher learning in Arkansas. This has been due in most part to the fact that in the past, enrollments were relatively small and financing was inadequate. The projection of 80 additional new major programs in the State and 26 programs expanded to other campuses during the next 13 years would appear to be too ambitious since some of the programs currently offered produce a relatively small number of degrees. The number of baccalaureate degrees awarded by the institutions from 1962 through 1967, as shown in Table XXV in Appendix III would seem to justify the majority of the major programs offered during this period; however, there are a number of programs which cannot be justified. The nine institutions offered 279 major programs (111 different majors) leading to the baccalaureate degree, with 121 or 43.10 per cent of the 279 programs graduating less than five students per year over the five-year period from 1962-1967. This data seems to indicate that there exists a greater need for increasing enrollments and quality in this 43.10 per cent of the present programs than for developing any large number of new programs. The majority of the duplication of programs occurs in the areas of Liberal Arts, Education, Science, and Business. This is to be expected and should not be considered unnecessary duplication, since most of the four-year colleges and universities are basically Liberal Arts, Teacher Training institutions.

It may be observed from Table XXVII that of the baccalaureate degrees granted during the five-year period, 1962-67, 20.21 per cent were in Liberal Arts, 26.80 per cent in Education, 13.70 per cent in Science (of which the majority were teaching degrees), and 18.41 per cent in Business (also mostly teaching degrees). These four areas produced 89.12 per cent of all the undergraduate degrees awarded during this period. Even though 89.12 per cent of the degrees produced were in these four areas, there were 80 degree programs, (or 28.67 per cent of the 279 major programs) offered in other areas. This indicates that a number of these programs are low enrollment, high cost programs. In fact, there are a few programs in which wasteful overlapping and duplication do exist (as an example, Agriculture).

Special Programs:

Programs included in this section are those for which there is a particular need in the State but which should in most instances not be offered in more than one or two institutions; programs in which course work and degree production is relatively low; and programs of a high cost nature in which there appears to be some unnecessary overlapping and duplication.

Agriculture: Due primarily to the fact that the majority of the public institutions of higher learning developed from area agricultural schools, there is some duplication of programs and services in Agriculture among the various institutions.

During the early stages of the study, questions were raised by various farm groups, the general consultants, and the Legislature as to the location, quality, and future development of agricultural programs in the State. Since agricultural programs and services appeared to be one of the most controversial areas in higher education in Arkansas and certainly one of higher cost programs, it was decided that a special consultant with a broad background of experience and expertise in the field of agriculture would be secured to study the agricultural situation in Arkansas.

The Commission on Coordination of Higher Educational Finance secured the services of Dr. Harold Macy, Dean Emeritus, Institute of Agriculture, University of Minnesota for this purpose. Dr. Macy conducted a study of the agricultural programs and services of the State and presented his analysis and recommendations to the Commission in May, 1968. The findings presented by Dr. Macy are as follows: 100

Six of the eight State supported institutions of higher education in Arkansas offer programs in Agriculture. This widespread offering of such a high cost program in a state the size of Arkansas is explained, to some extent, by the history of these institutions.

The University of Arkansas is the Land-Grant college of the State; and as such, in its teaching programs

offers work in a variety of Agricultural programs through the Doctorate Degree.

Arkansas Agricultural, Mechanical, and Normal College, established originally as a branch of the University of Arkansas, offers a limited four-year program in Agriculture and gives a Baccalaureate Degree in this field.

The other four institutions, Arkansas State University, Arkansas Polytechnic College, Southern State College, and Arkansas Agricultural and Mechanical College, were originally established as district agricultural high schools with the counties to be served by each named in the Act of their establishment.

Arkansas State University, the largest of the four, has developed an Agricultural program leading to a Baccalaureate Degree in certain fields. The other three institutions offer two years of Agriculture, and students wishing to continue in this field transfer to the University of Arkansas or Arkansas State University.

The spectrum of courses offered by the remaining three institutions is too wide when the size of the staff at these institutions is considered. The extent to which these programs are successful is due primarily to the dedication of the individuals who head the respective programs. The duplication of widespread offerings could be curtailed were the University of Arkansas centrally located or at least adjacent to the major agricultural areas of the State. Since this is not a fact and not possible, the following recommendations are made to assure quality programs at all levels of teaching and research.

Recommendations:

1. **The University of Arkansas**, as the principal Land-Grant College in the State, is responsible under the Land-Grant College Act and subsequent legislation in this field accepted by the General Assembly of Arkansas for the training of students in the field of agriculture, for acting as the agricultural research agency of the State of Arkansas, and for agricultural extension. As the center for teaching, research, and extension, it should:
 - A. Offer training through the Doctorate level in Agricultural programs:
 - B. Be the principal research agency with the responsibility of making full use of all facilities and all staff, wherever they are located within the State, with competence in the field of research and facilities available to them.
 - C. Be the principal in efforts of the State in Agricultural Extension. However, where possible and feasible, activities in extension should be coordinated with the institutions offering agriculture and with qualified staff.
2. **Arkansas Agricultural, Mechanical And Normal College** has an exceptionally well-qualified staff. However, it needs augmentation if it is to continue to offer the broad range of courses now offered and if members of the staff are to be given an opportunity to engage in agricultural research. The University of Arkansas should recognize a special responsibility to Arkansas Agricultural, Mechanical and Normal College since it is the Negro Land-Grant college, and should encourage and support agricultural research in the area where the staff of the institution has competence.
3. **Arkansas State University** - While this institution was one of the original agricultural high schools, it has grown to become the second largest higher educational institution within the State, and was given university status by the 1967 General Assembly. Here, too, the institution is attempting to do too much with too little. It lacks both staff numbers and adequate facilities. Its first responsibility is to develop a quality four-year program at the institution, and as indicated above, this will require added staff and added facilities. When this is achieved in areas where the demand is, sufficient programs at the master's level could be considered. Quality programs at even an undergraduate level cannot be achieved without some research activity on the part of the staff. Here, too, the University of Arkansas should assume a responsibility in

assisting in the establishment of a research program insofar as staff competence and facilities are available within the framework of an overall program of agricultural research in the State. It may be desirable for joint staff appointments to be made between the University of Arkansas and Arkansas State University for research and extension purposes, and that the institution act as a center for research and extension in this area of Arkansas.

4. The remaining three institutions offering Agriculture, Arkansas Polytechnic College, Southern State College, and Arkansas Agricultural and Mechanical College, are attempting to do too much with too little. The programs at these institutions at the freshman/sophomore level do not parallel the normal freshman/sophomore courses in four-year institutions. These programs should be more nearly tailored to serve the clientele of the area in which the institution is located, specializing in a very few areas that would serve a student contemplating only completing a two-year program such as Agriculture or Forestry Technology. Programs offered for transfer work should be more carefully tailored to satisfy the requirements of the freshmen/sophomore years in a four-year program. This latter step could be made with agreements between the two major institutions to which students transfer for further agricultural work.

In each case, if the present programs are to be continued, then staff must be added to assure at least a minimum of quality in instruction. Where the number of students taking Agriculture does not justify the addition of staff, then consideration should be given to phasing out this program in that institution.

The continuance of these programs at these institutions, since their establishment in 1909 to the present, is to some extent at least predicated upon the fact that they have always had Agriculture in their programs and the fact that they are located in an agricultural area; but continuance of the program without quality is a waste of student time and State money.

5. While there has been some attempt at coordination of effort among the institutions offering Agriculture, much more needs to be done and on a more formal basis. It is recommended that an Agricultural Council be established to coordinate these activities and for the purpose of keeping all the institutions informed as to the work that is going on in each institution, and how each institution through a coordinated effort can serve best the agricultural interests of the State.

It is recommended by the Coordinating Committee and the general consultants that Dr. Macy's recommendations be adopted and that these recommendations serve as a guide to the individual institutions, the Commission on Coordination of Higher Educational Finance, and the Legislature in planning future agricultural programs and services in the State.

Architecture: At the present time Architecture is being offered only at the University of Arkansas. Many states with comparable needs in this area do not have programs in Architecture (for example Mississippi). Instead of developing programs in their own institutions they have found it advantageous to enter into cooperative agreements with other states. It appears that the one School of Architecture will be adequate for the needs of the State at least until the end of the period covered in this study (1980-81). Therefore, it is recommended that additional Schools of Architecture be approved only if through careful study of the actual needs and demands for new programs in this area it is found that these programs can be justified.

Engineering: There is presently only one public institution of higher learning in the State offering degree programs in Engineering. Since most Engineering programs are low enrollment, low production, and high cost programs, it is recommended that new programs be approved only if through careful study of the actual needs and demands for new programs in this area it is found that these programs can be justified.

Forestry: Dr. Harold Macy, Consultant in Agriculture for the Comprehensive Study of Higher Education in Arkansas, has analyzed the Forestry programs of the State as follows: 101

The Arkansas Agricultural and Mechanical College at College Heights lists in its catalog a series of 30

courses in Forestry, taught by a competent staff of five. A Bachelor of Science in Forestry Degree is given after a four-year course.

The College is "situated in the piney woods of Southern Arkansas and only a few miles from the Mississippi bottom-land hardwoods." There are sawmills, pulp and paper mills, cooperage, and chemical wood plants in the vicinity of Monticello. The Crossett Experimental Station of the United States Forestry Service is conveniently close to the College. The cooperation with industry and the Forestry Service is very satisfactory. The Department of Forestry manages 1,132 acres of school forest lands, with 320 acres adjacent to the campus. A nursery is also operated by the Department for student instruction and demonstration. The Department seems to be well equipped to give a variety of field and laboratory instruction.

A limited research program is underway. There is cooperation with the University of Arkansas involving McIntyre-Stennis Federal funds for research.

There has been an effort to secure accreditation of the Department, but to date this has not been successful.

Service courses in forestry are given in pre-Forestry curricula at the Arkansas universities and the other State colleges offering agricultural instruction.

It would appear that the College could serve the State of Arkansas satisfactorily in offering the collegiate program in Forestry. One such center should be sufficient for the State. Research funds are needed very much for the broader service to Arkansas growers and industry.

There should be close cooperation between the Arkansas Agricultural and Mechanical College Department of Forestry and the other State institutions both in teaching and research, including the pre-Forestry programs now being offered at all of them.

The University of Arkansas should provide assistance to Arkansas Agricultural and Mechanical College in its efforts to gain National accreditation of the Forestry program. This might be done through a cooperative arrangement for sharing research facilities, staff, and funds of the Branch Agricultural Experiment Station located in the area and Arkansas Agricultural and Mechanical College.

Home Economics: At the present time, five institutions (public) are offering degree programs in Home Economics. In the past few years two institutions have phased out their Home Economics offerings. It appears that there is no need for additional programs at this time. In fact some of the smaller institutions should probably study the feasibility of discontinuing their present programs or of revising them to meet current demands of employing agencies.

Nursing: At the present time there are two degree programs in Nursing offered in the State. Dr. W. B. Fisher in his study, **Personnel Needs in the Health and Adaptive Behavioral Problem Service Areas in Arkansas**, indicated that there is an immediate need for 1,092 additional nurses and 377 more will be needed by 1972 and 188 more by 1977, or a projected total need of 1,657 for nurses with the Bachelor of Science Degree by 1977. The current programs are not producing enough graduates to come anywhere near filling the 1977 need. It is recommended that both programs be expanded to the maximum and that consideration be given to the establishment of additional degree programs if the expanded programs cannot meet the needs of the State.

Dr. Fisher's study indicates even a greater need for associate degree programs. The study results indicates that there is an immediate need for 786 nurses in this category with projected additional needs of 1,394 in 1972, 109 in 1977, or a total of 2,289 additional nurses holding the associate degree by 1977. 102

In states having a highly developed system of public community junior colleges, most of the Associate Degree programs in Nursing are located in these institutions. It appears obvious that both of the public junior colleges located in the State should devote considerable attention to these programs; and when additional public

community junior colleges are established, Associate Degree program in Nursing be included in the curriculum.

Pharmacy: In the study conducted by Dr. W. B. Fisher and cited previously in this study, it is indicated that the State graduate 40 pharmacists in 1967; and that a need existed for 278 additional pharmacists, that 237 will be needed in 1972, and 151 more in 1977, or a total need for 666 additional pharmacy graduates by 1977.¹⁰³ It is felt that the present School of Pharmacy can produce the graduates needed by the State and that no additional Schools of Pharmacy should be established in the foreseeable future.

Consideration of Programs: 104

In considering the initiation of new programs and the continuation of present programs, the Committee noted first of all the control of present institutions of higher education is autonomous. The Committee did not recommend that any change in this legal independent status be undertaken at the present time. However, a cooperative examination by professional colleagues and the collection and examination of certain data would be useful to higher education in Arkansas, as well as the particular institution that may be considering the establishment of a new, expensive program or continuing a wasteful program duplicated by other institutions.

The Committee recommended that a central agency, such as the Commission on Coordination of Higher Educational Finance, continue to collect data on programs that are currently offered with particular attention to costly programs with small enrollments. The information to be included should be the number of students enrolled, cost per student semester credit hour produced, faculty and facility requirements, and relationship to current programs. The central agency should be asked to examine proposals for new programs and made recommendations as to whether or not the new program is warranted on the basis of need, demand, and resources available. Programs of high cost and low enrollment should also be examined by the Commission with recommendations made as to continuation or deletion of the program. The recommendations of the various accrediting associations should also be solicited.¹⁰⁵

The Committee felt that the Commission should utilize a committee composed of faculty members from the various institutions in the State to make recommendations concerning initiation of new programs and discontinuing present programs. A careful examination of present and new programs is especially appropriate since Arkansas institutions have stated that almost 100 new programs will begin in the next 12 years.¹⁰⁶

The consultants and members of the Coordinating Committee feel that further recommendations should be made in regard to four and five-year undergraduate programs. It is felt that the objectives of program review and approval as favored by the Committee on Four and Five-Year Undergraduate Programs cannot be accomplished unless the present Commission is empowered to review and approve or disapprove all new programs at both the undergraduate and graduate levels.

Student Admission and Retention: 107

A survey of college catalogues and direct contact with admissions officials suggests both a diversity of stated admissions requirements and a practice of flexibility regarding the application of their requirements in State and private institutions in Arkansas. The following general statements may be helpful in providing background information.

1. The State colleges and universities in Arkansas have had an "open-door" policy for Arkansas students regarding admission, although the University of Arkansas made an effort two years ago to modify this policy by requiring all students to have minimum of a "C" average.
2. Public four-year colleges in Arkansas have emphasized a "selective retention" system rather than a "selective admissions" system and seem to be rather strict and consistent in adhering to these regulations. There are differences, however, in the retention of students of the various State institutions.

3. The colleges as a group have maintained higher admissions standards for out-of-state students.
4. Many educators, while recognizing a need for admissions standards, also express an ethical concern when there is little other education available beyond high school. This may be related to the fact that in states which have a system of junior colleges and/or vocational-technical schools, there seems to be evidence of more selectivity in four-year colleges.
5. College-age population has increased more rapidly in some areas of the State than in others. Selective admissions has been forced upon colleges in some areas simply because they could not absorb all applicants.

The selection of applicants for admission of college continues to be less than a science, for no factor or combination of factors are available to enable an institution to select with a great deal of accuracy only those students who will succeed in college. For this reason, the Committee hesitates to recommend any policy except the continuation of the present policy of admitting all Arkansas residents who have completed high school graduation requirements. However, the Committee would like to point out the close relationship between unrestricted admission on one hand and the need for new facilities, heavy faculty teaching loads, and low faculty salaries on the other. Therefore, the State of Arkansas must find a way to provide adequate support for higher education or face the problem of restricting enrollment in institutions of higher learning, at least for the fall semester of each year. The present "open-door" policy and inadequate staffing may result in penalizing all students who attend Arkansas institutions of higher education.

The following recommendations for admission and retention are offered in addition to the comments in the preceding paragraph: 108

1. So long as there is no public community junior college system in the State, policies concerning the admission and retention of students at the several public senior colleges and universities should focus on "selective retention" rather than "selective admissions;" and further these institutions should have special tutorial programs for students without adequate academic preparation. When the junior college system is developed, the colleges and universities should then establish some system of selective admission for Arkansas students.
2. Admissions requirements for out-of-state students should remain within the jurisdiction of each particular institution. It is recommended, however, that these requirements be substantially higher to insure the selection of students who have demonstrated college potential.
3. While, for the present, the specifics of admissions and retention policies should remain with the individual institutions, the Commission on Coordination of Higher Educational Finance should be empowered to approve, if necessary, minimum admission requirements.

The consultants and members of the Coordinating Committee are in general agreement with the above recommendations of the Committee on Four and Five-Year Undergraduate Programs.

Faculty Recruitment and Retention: 109

The recruitment and retention of faculty members is of great concern to all the colleges in Arkansas. The most critical problems in the recruitment and retention of faculty are concerned with finances. There has been a significant increase in faculty salaries of Arkansas institutions during recent years. However, the average salary in Arkansas has been and continues to be below the National or Regional averages. (See Tables XXIX and XXX). An increase is needed so that institutions may offer salaries that are competitive with those of the Nation as well as surrounding states, and the salaries must also be competitive in the subject fields in which faculty are scarce. Although most of the faculty members may be recruited from Arkansas or states surrounding Arkansas, some persons must be recruited from throughout the Nation.

TABLE XXIX

COMPARISON OF AVERAGE NINE MONTHS' TEACHING SALARIES
THE UNIVERSITY OF ARKANSAS AND UNIVERSITIES OF ADJOINING STATES

For the Fiscal Year 1966/67		Number of Institutions	All Ranks Combined*
Institution			
<u>ARKANSAS</u>			
University of Arkansas	1		9,616
<u>OKLAHOMA</u>			
University of Oklahoma	1		10,819
Oklahoma State University	1		9,803
<u>MISSOURI</u>			
University of Missouri	1		10,312
<u>LOUISIANA</u>			
Louisiana State University	1		10,279
<u>TENNESSEE</u>			
University of Tennessee	1		9,924
<u>MISSISSIPPI</u>			
Mississippi State University	1		9,789
University of Mississippi	1		9,583
<u>TEXAS</u>			
University of Texas	1		12,592
Texas A & M University	1		10,793
NATIONAL MEDIAN SALARIES, 1965/66** (Public Universities 10,000 and over)	48		10,053

* Does not include teaching assistants and lecturers.

** Salaries in Higher Education, 1965/66, National Education Association, February, 1966.

TABLE XXX

COMPARISON OF AVERAGE NINE MONTHS' TEACHING SALARIES
STATE COLLEGES OF ARKANSAS AND COLLEGES OF SURROUNDING STATES

For the Fiscal Year 1966/67

<u>Institution</u>	<u>Number of Institutions</u>	<u>All Ranks Combined*</u>
ARKANSAS	7	7,746
OKLAHOMA	9	8,368
MISSOURI	2	9,073
LOUISIANA	5	8,538
TENNESSEE	3	8,565
MISSISSIPPI	5	7,677
TEXAS	20	9,427
NATIONAL MEDIAN SALARIES, 1965/66**		
(State Colleges)	228	8,750

* Does not include Teaching Assistants and Lecturers

** Salaries in Higher Education, 1965/66, National Education Association, February, 1966.

Persons responsible for recruiting faculty for Arkansas institutions state that low salary is of first or second importance among problems in recruitment or retention. The other problems listed in order of importance are teaching load, State image, lack of research facilities and opportunities, lack of graduate program, and last in the order of importance was the lack of metropolitan environment. A number of these problems are related to the relative lack of funds.

The most serious problem is the extreme difficulty in attracting experienced persons who have earned the doctor's degree. Colleges meet with fairly good success in attracting persons with the master's degree who have little or no college teaching experience. The salary in Arkansas for persons who are employed as instructors and assistant professors is slightly lower than comparable salaries at the National level; however, the salary offered to the full professor who is experienced and holds the doctor's degree is well below the National level.

Thus, it appears that salary and teaching load should receive top priority in the formulation of short-term plans as well as long-term plans.

The consultants for the study and members of the Coordinating Committee have all expressed concern over the procedure Arkansas follows in establishing salaries for administrative and academic personnel at the several public colleges and universities. It should be pointed out that Arkansas is one of the very few states in the Nation in which the Legislature or a noneducational agency actually sets the salaries for these positions.

It is felt that if Arkansas is to provide the educational leadership and quality instruction necessary to produce graduates who can compete with their contemporaries throughout the Nation, its institutions of higher learning must be placed in a position where they can compete in the faculty and administrative market place. In order to assist the institutions in meeting this critical issue, it is recommended that the State Constitution be amended in such a way that the several institutional Boards of Trustees will be empowered to establish the salaries for the administrative faculty and research positions at their respective institutions. The consultants feel that this is one of the most critical problems confronting public higher education in the State.

Present and Projected Four and Five-Year Undergraduate Programs in Private Institutions:

Much of what has been said about four and five-year undergraduate programs in public institutions can be applied to the privately sponsored institutions as well. The nine private senior institutions of higher education in Arkansas offer education similar to that offered in the public institutions, except that, in general, these institutions place greater emphasis on Fine Arts, Liberal Arts, and Religion than do the public senior institutions.

The nine private institutions are all basically Liberal Arts and Teacher Training institutions; their programs vary from ones orientated strongly to the Liberal Arts to others strongly orientated to teacher training. Table XXXI in Appendix III contains a tabulation of the degree programs offered by the private colleges in Arkansas in 1966-67. In analyzing the data in this Table one may observe the strong emphasis placed on Liberal Arts and the similarities in the programs of these institutions.

Table XXXII in Appendix III contains a tabulation of the number of baccalaureate degrees awarded by private colleges in Arkansas for the five-year period, 1962-63 through 1966-67. From an analysis of this table, it may be observed that these institutions award a total of 4,624 baccalaureate degrees during the five-year period. The majority of these degrees were awarded in Liberal Arts (1,403) and Education (1,241). These figures reflect rather dramatically the strong emphasis placed on Liberal Arts and Teacher Training.

In reviewing the projections of new programs to 1980-81 as presented by these institutions in their individual "Role and Scope" studies, it was observed that most of them indicated some additional programs in Liberal Arts, Fine Arts, and Education. The additional programs were, in general, viewed as being necessary in order to strengthen these areas and to meet the needs of an expanded enrollment.

After reviewing the report of the Committee on Four and Five-Year Undergraduate Programs and analyzing the implications to public higher education in the State, members of the Coordinating Committee and the consultants recommend that:

1. The authority of the Commission on Coordination of Higher Educational Finance should be expanded to include approval or disapproval of all new units of instruction at the undergraduate level. The term "new unit of instruction" should include the establishment of a college, school, division, institute, department, and curricula or majors leading to a new degree program. The term "new unit of instruction" should not include the approval of separate courses.
2. The Commission on Coordination of Higher Educational Finance should be given the authority to review existing programs at the undergraduate level; and further, that the Commission be authorized to discontinue programs in which there is found to be unnecessary and wasteful overlapping and duplication.
3. In cooperation with an advisory committee composed of representatives of the public senior colleges and universities, the Commission on Coordination of Higher Educational Finance should develop criteria for establishing new undergraduate programs or new units of instruction, and where the need is evident, recommend establishment of such programs.
4. Consideration should be given to the establishment in the senior colleges of programs of less than the baccalaureate degree level to satisfy an immediate and growing need for sophisticated technical programs, para-medical programs, and other occupational programs in areas where a community junior college is not available to offer these programs.
5. In the future new undergraduate programs in Agriculture, Architecture, Engineering, Forestry, Home Economics, and Pharmacy should be authorized only if the actual need and demand for such programs is evident.
6. The two undergraduate degree programs in Nursing presently being offered at the University of Arkansas Medical Center and State College of Arkansas should be expanded to the maximum and consideration given to the establishment of other additional degree programs if the expanded programs cannot meet the needs of the State.
7. Presently, five Associate Degree in Nursing programs are authorized, two at the State community junior college and three at State senior colleges. Additional programs should be established in areas where clinical facilities are available and there is evidence of sufficient interest on the part of students. With the establishment of additional community junior colleges, the Associate Degree in Nursing program should be established at these institutions rather than at senior institutions in the same area.
8. The three two-year programs in Agriculture should be improved in quality and reorganized to serve better the agricultural interests in the area in which they are located and provide quality work at the freshman and sophomore levels for students who wish to transfer and continue their college work in Agriculture.
9. The undergraduate program in Agriculture at Arkansas State University should be developed to meet acceptable criteria.
10. Since education and training in the field of Agriculture are basic to the economy of the State, the Commission on Coordination of Higher Educational Finance should encourage the establishment of an interinstitutional committee representing the institutions involved in any way in Agriculture to provide that all resources possible be brought to bear on needs in this area.
11. Until a statewide system of community junior colleges is developed, the State senior institutions will continue to accept students on practically an "open-door" policy for all high school graduates. If the

capable but poorly prepared student does not receive at the institution training in sub-college courses designed for that purpose, the result will be the lowering of institutional instructional standards or the elimination of such students. If such an "open-door" policy is to be followed, the sub-college courses should be offered by the institutions.

12. Admissions requirements for out-of-state students should remain, for the present, within the jurisdiction of each particular institution. It is recommended, however, that these requirements be substantially higher to insure the selection of students who have demonstrated college potential.
13. While, for the present, the specifics of admissions and retention policies should remain with the individual institutions, the Commission on Coordination of Higher Educational Finance should be empowered to approve, if necessary, minimum admission requirements.
14. The State Constitution should be amended in such a way that the several institutional Boards of Trustees be empowered to establish the salaries for the administrative, faculty, and research positions at their respective institutions in accordance with general policies governing salaries set by the Commission.
15. Public undergraduate education in Little Rock should be expanded to meet the needs of citizens of the area.

Present and Projected Graduate-Professional Programs and Research: 110

While the major emphasis in graduate studies has always been the scholarly pursuit of knowledge, professional preparation for high-level employment is now growing in importance. More and more of the country's ablest young talent are enrolling for graduate-professional study. More and more employment recruiters are turning to graduate schools as a source of trained personnel.

The state that fails to provide adequate opportunities for graduate and professional study or permits its universities and colleges to turn out inferior graduates, is failing to capitalize on one of its greatest natural resources. Many of these young people leave the State for better educational and employment opportunities elsewhere and seldom return. Arkansas can ill-afford this drain of its highly educated manpower.

The colleges and universities of Arkansas, however, have been unable to keep pace with needs for graduate-professional training. Analytical reports reveal that elementary undergraduate instruction still constitutes the largest instructional workload in all of these institutions.

The chief reason for this imbalance appears not to be too much effort at the lower levels, but too little input at advanced levels. Arkansas educators and the out-of-state consultants have expressed repeated concern that graduate education in the State is too often characterized by small faculties, low enrollments, minimal facilities, marginal financing, and inadequate equipment and libraries. Competitive salaries, attractive fellowships, and modern physical resources must be provided if the imbalance is to be corrected.

If other institutions of higher learning, such as the public community junior colleges, assume a larger role in undergraduate instruction, it may be possible for the colleges and universities to shift a larger portion of their resources and energies to meeting needs for advanced instruction. In any event, it is clear that much more emphasis must be put on this crucial role of Arkansas' institutions.

In its analysis of present and projected programs, the Committee on Graduate-Professional Education and Research points out that the tremendous growth of graduate work and research is one of the most significant trends of our times. The Committee in appraising this trend in Arkansas indicates that total college enrollment in Arkansas State supported colleges and universities is expected to increase from 30,387 in 1966-67 to 71,293 in 1980-81. Of this total it is anticipated that approximately 7,500 will be graduate students, which is far short of the needs of the State. Therefore, Arkansas, in order to maintain its position on a relative basis, must be prepared for a very large increase in graduate training.

The Committee on Graduate-Professional Education and Research made a study of present graduate and professional offerings in the State. A summary of the scope and status of present graduate and professional offerings is presented in Table XXXIII in Appendix III. Professional programs are also dealt with in separate sections of this report and include Medicine, Law, Dentistry, and Veterinary Medicine.

The Committee emphasizes that the urgency for adequate programs to meet the rapidly expanding enrollments will be met if and only if adequate financing is made available. It was also pointed out that quality programs must be determined by acceptable standards, and that research and graduate education are inseparable.

In its report the Committee on Graduate-Professional Programs and Research summarized its findings under five major headings: Master's, Specialist, and Doctoral Degree Programs; Professional Education; Research Activities; Financing Graduate and Professional Education and Research; and the Role of the Private Colleges in Arkansas' Higher Education Endeavor. The Committee's appraisal of these areas is as follows:

Master's, Specialist, and Doctoral Degree Programs: 111

Graduate work in the State of Arkansas was initiated at the University of Arkansas, Fayetteville, in 1886. Programs leading to the Master of Arts and Doctor of Philosophy Degrees were planned by the faculty at that time. The first master's degrees, two in number, were awarded in 1898. One Doctor of Philosophy Degree was awarded in 1890, but the program was discontinued in 1898.

Doctor of Philosophy programs were initiated again at the University in 1950 along with Doctor of Education Degree programs. The first degrees resulting from these new programs were granted in 1953.

In 1952 graduate centers were set up by the University at Arkansas State College, Arkansas Polytechnic College, Arkansas State Teachers College, Arkansas Agriculture and Mechanical College, Henderson State Teachers College, and Southern State College. Credit earned at these centers was applicable toward a Master's Degree in Education at the University with a limit of 12 semester hours for each candidate. Courses offered were primarily in the field of Education. Faculty members were selected from the faculties of the cooperating colleges in accordance with University of Arkansas graduate faculty standards.

In the summer of 1955, Arkansas State College (now Arkansas State University), Arkansas State Teachers College (now State College of Arkansas), and Henderson State Teachers College (now Henderson State College), initiated their own master's programs. The University continued with its cooperative arrangements offering work at Arkansas Polytechnic College, Arkansas Agricultural and Mechanical College, and Southern State College; and these arrangements are still in effect.

Graduate programs are also in existence at the present time leading to the master's degree at two of the private institutions—Harding College and Ouachita Baptist University.

Information pertaining to the number of graduate degrees conferred during the period 1962-1967 by the four State supported institutions offering graduate work has already been presented in Table XXV in Appendix III. These data include the number of graduate faculty identified by terminal degree, the maturity of each program, and identification of degree by subject matter field.

In regard to duplication, it is to be noted that master's programs are offered at all four institutions in the following fields: English, History, Mathematics, Elementary Education, Guidance and Counseling, and Physical Education. Available at three State supported institutions are the following: Social Sciences, Biology, Spanish, and Music. Master's programs offered at two State institutions are: Chemistry, Physics, Home Economics Education, Industrial Education, and Business Education. This information indicates that there is not at the present time unnecessary duplication of graduate programs in the State at the master's level. However, in some instances the small number of graduates would indicate that the need for these particular programs should be questioned.

Faculty qualifications with reference to number and terminal degrees generally meet minimum standards, but there are also apparent deficiencies. In some cases where faculty is not listed, Biology for example, the entry will be found in another place—Biological Science in this instance. One program in History lists no faculty which means that the program is carried by instructors with degrees in Social Sciences. Situations such as this should be given special study. Many faculty listings in Agriculture may be a bit misleading since these are in terms of the speciality within the field itself. For example, Animal Nutrition is a specialized field within the Department of Animal Sciences. This situation will also be found in some of the fields in Education.

Professional Degree Programs: 112

Professional educational programs of high quality are necessary and expensive. In recognition of this the Committee recommended that present programs between Arkansas institutions and institutions in other states be carefully considered before expansions are made.

In its report the Committee confined its considerations to Medicine, Dentistry, Veterinary Medicine, and Law. Other professional programs are within the province of the Committee on Four and Five-Year Programs.

Medicine 113

The School of Medicine was organized in Little Rock as the Medical Department, Arkansas Industrial University in 1879. It was originally a joint stock corporation and was not given complete university status until 1913 at which time it received the first appropriation of State money from the General Assembly. The first class graduated one student in 1880. Ten students were graduated in 1881.

There are presently 1,384 physicians in Arkansas or a ratio of 72 per 100,000 population. The National average is 110 per 100,000 population. The distribution varies from 41.6 per 100,000 in counties under 10,000 (total population 127,300) to 95.0 per 100,000 in counties of 50,000-100,000 (total population 465,000) and 116 per 100,000 in Pulaski County (26 per 100,000). Assuming an overall deficit of 740 physicians below the National average in 1967 and an increase of 550 required for the projected population increase plus a replacement figure of 460 physicians who will leave practice over the next 12 years gives a need for 1,750 new physicians by 1980. Assuming that the Medical School will graduate 100 physicians out of each entering class from 1968 onward, there will only be 1,150 graduates during this period. If the number of physicians who leave the State is balanced by those who enter, the physician ratio will be 88 per 100,000 based upon the 1980 population estimates or 108 per 100,000 based upon present population.

In order to provide physicians for the increased population, there will have to be an increase in the size of the Medical School graduating class by 30-50 students per year over the theoretical 100 per year for a period of 20 years to reach the present National average.

It is not possible to expand the present Medical School capacity beyond 110 entering students per year without extensive construction, and it is only by virtue of the improved selection afforded by including out-of-state students that it is possible to raise the number of graduates to a theoretical 100 per year.

The changing pattern of medical practice toward greater specialization and concentration of hospital facilities in larger communities may, in part, relieve the pressure for further increases in physician per population ratios; but the advances in medical therapy and preventive medicine programs on broad social levels certainly will prevent any fall in this ratio. In fact, three changes will place several obligations upon the medical teaching units; (1) Increased training of special types of para-medical personnel; (2) Increased post-doctoral (residency-specialty) training for physicians; (3) Re-education and continuing education for physicians in practice to adapt them for more effective service to the community.

The recent development of a regional medical program that is integrated with the School of Medicine provides a vehicle for continuing education and expansion of post-graduate training in Arkansas. In the long-term approach some State revenues may have to be employed in this area if Federal funds do not continue.

The needs for expansion of the Medical Center are (1) remodeling of the University Hospital to accommodate 425-50 adult acute short-term patients; (2) remodeling of the clinics and parking facilities; (3) relocation of the Medical Library, School of Nursing, School of Pharmacy, and future Allied Health programs to a separate building; (4) remodeling of the vacated space to accommodate clinical research and clinical administrative offices; (5) a new building to house basic medical sciences and expansion of research areas; (6) a 200-250 bed Pediatric Hospital; (7) construction of a 100-room motel facility to house out-patients and relatives accompanying patients on short-term hospital visits; and (8) a Rehabilitation Hospital.

The motel is needed to house out-patients who are undergoing diagnostic procedures and who come from a wide geographic representation of the lower economic level. In addition, many of the patients (especially children and elderly) have escorts who require lodging. The purpose of the motel is to provide low-cost lodging over short periods. This will obviate unnecessary admission and allow diagnostic investigations to be completed in one visit to the Medical Center.

These changes will require a minimum of \$80,000,000, but between one-half and two-thirds of the funds are available from the Federal Government. To sustain this expanded program, an increase of at least 200 per cent above the present operational budget allocation from the State or other sources—from \$7,000,000 to \$21,000,000 per year—will be required. Part of this figure is predicted upon the recognition that the present faculty is 50 per cent below the National average size. Without an immediate purchase of considerable real estate adjacent to the Medical Center or a transfer of nearby State properties before they are exhausted, none of these needed expansions can be effected. This may lead to the abandonment of the present facilities which would cost \$40,000,000 to duplicate at today's prices.

The faculty shortage of the Medical School has been sorely neglected and serves as a prototype of the problems the State will face if educational facilities continue to expand in Arkansas without proper financial support.

The present overall student/faculty ratio is 2.8 (1965-66) contrasted with the National average for that year of 1.9. The student/faculty ratio for the first two (basic science) years is 4.3 as compared with the average Nationally of 3.0. In the last two (clinical) years Arkansas' ratio was 2.0 versus the National ratio of 1.3. Projection of the average ratios for the present faculty indicates an optimum entering class of 75 rather than 110. The shortage of faculty is the result of low salaries and the long-standing history of poor State support. It is recommended that the average annual salary be raised so as to be competitive with other states.

Review of trends in medical practice indicates that the greatest proportion of future physicians will demand postgraduate (residency) training. Almost all of this training will be centered around medical schools. Effective training of this type will be a major asset in establishing in-migration of physicians. The need for a financially supported, larger, well-equipped university hospital thus becomes a greater need than a larger medical school. Past appropriations in this area have consistently ignored this aspect of the physician problem.

Among the inherent costs of a post-doctoral program in medicine (residency) is the financial inducement. Actually, residency training is a work-apprenticeship and much of the work done has considerable value as medical services. The present and developing trend for teaching institutions is to pay reasonable salaries for this training period. In order to attract high quality physicians to the training program, the program must be educationally sound and financially competitive. The physician retention rate for the State is very high from such programs. The loss to Arkansas of her graduates migrating elsewhere because they take training outside the State is also high. At present the Medical Center cannot accept even half of the Arkansas graduates who wish to take further training. Our ability to attract physicians from other states is also hampered.

The health industry represents a large potential source of Federal income for the State. If the Medical School and its hospitals as well as the State health agencies are not handled with an informed eye to the future, much of this income will be lost and the State will suffer both financially and in its health care. Arkansas' share of the health research and health training dollar is well below the one per cent that our population represents.

The school exists in a vicious cycle of understaffing, overwork, underplanning, under funding, and underexpansion leading to understaffing, etc. There must be a marked increase in State appropriations or novel rearrangements of the State health affairs must be instituted to allow double use of every State health care dollar.

In view of the many problems raised by the Committee in its study of the Medical School, the Commission on Coordination of Higher Educational Finance asked Dr. John W. Oswald, President of the University of Kentucky, one of the general consultants, and Dr. Joseph F. Volker, Vice President of Health Affairs and Director of the Medical Center of the Medical College of Alabama, to assist the Committee in its evaluations of the problems facing the Medical School. The recommendations of the Committee appear in the summary of recommendations at the end of this section of the report.

The general consultants and members of the Coordinating Committee are in agreement with the recommendations of the special consultants in this area and would recommend that the Legislature and the Commission on Coordination of Higher Educational Finance use these recommendations as a guideline in dealing with the problems of the Medical Center.

Veterinary Medicine 114

The veterinarian needs for Arkansas at present involve public health, small animal, farm animal, and scattered industrial positions. In the first and last areas, poultry and inspection are most important at present, but the need for veterinarians on contract farming operations in the cattle industry will increase in the near future. It is likely that subsidized Governmental agencies and positions with great economic opportunity will satisfy some of our professional needs through in-migration, but State agencies and other community needs may continue to suffer from a shortage of veterinarians due to a low local income potential and small Arkansas student interest. The present subsidy method for veterinary students should be continued along with a firm agreement to insure places for Arkansas students in neighboring Schools of Veterinary Medicine. The retention of future graduates in the State is not very certain by present methods. Ten of 29 graduates from 1958-1964 have already left the State, and 32 counties have no veterinarians. Veterinary technologist (baccalaureate) and assistant (vocational) programs are needed to balance our inevitable continued shortage of professionals. One of each type of program should be initiated by 1975. Some involvement of State agencies in methods for retaining graduates and also in recruiting new candidates is the most likely way to increase the number of active veterinarians in the State.

Nationally, about 70 per cent of the veterinarians are in private practice and most of the rest are employed by Federal and State agencies. There are about 150 members of the State Veterinary Medicine Association. This includes 30 Federally employed, university based, or retired members. Thirty-five additional veterinarians are employed in industry. These are almost all specialists, frequently transients, and represent in-migration.

The average number of veterinarians in the United States is 12 per 100,000 population indicating 240 veterinarians for Arkansas, of which about 170 should be practice and 70 veterinarians with various agencies. This figure is only three per cent lower on the National scale than is the percentage of physicians.

There are 18 Schools of Veterinary Medicine in the United States, the nearest ones being in Oklahoma, Texas, Missouri, and Kansas. The severe shortage of training facilities may soon lead to Federal subsidy of new schools.

The cost of a veterinary medical school is in the range of \$10,000,000 exclusive of the land. Two-thirds of the funds are available from the Federal Government. The annual operating cost will be about \$2,000,000 a year but would be less if coordination with the Medical Schools could be effected.

It is improbable that Arkansas could provide the student body to maintain such a veterinary medicine school. A consortium would have to be established with states like Mississippi, Louisiana, Tennessee, and possibly Texas to fill the enrollment and support the operation. It would be easier to establish a working relationship with one of these states if they should consider building a school or to further develop the relationship with Oklahoma

through a contract arrangement.. To maintain 80 students (20 per year) at \$5,000 per student per year would cost \$400,000 per year, which would be less than the share of an Arkansas-based consortium. At least 25 per cent above the actual annual cost should be given to the out-of-state schools for each Arkansan enrolled. The funds should be unrestricted in their use by the recipient school. Student loans should be made available to candidates who would indicate a willingness to return to Arkansas for the purpose of practice in order to qualify for the loans.*

Technologist programs in Arkansas should be developed in collegiate and graduate departments in the biological and agricultural sciences. With the great increase in the chemical and submicroscopic understanding of the function of living cells and the overlap of many diseases between lower mammals and man, such programs might benefit from close association with the School of Medicine.** Farm acreage would be needed to keep a variety and number of animals and this is very expensive in urban areas. Nevertheless in Greater Little Rock (both in North Little Rock and toward Benton) such space can still be found.

Dentistry 115

There are 617 dentists (32 per 100,000) in Arkansas. The National average is 45 per 100,000 indicating a deficit of 254. Over the next 12 years, 206 replacement dentists will also be needed plus 240 to bring the number up the present National average figured on the anticipated 1980 population. This indicates a need for 700 dentists in the 12-year period or more than 50 per year. The dental society estimates that the State can absorb at least 35 dentists a year at the present population.

Arkansas now has fewer than 25 students entering neighboring dental schools on State subsidy annually. While a dental school producing 40-50 graduates per year is a possible solution to Arkansas' needs, the cost of such venture would be about \$10,000,000 for the physical plant (two-thirds of the funds being available from the Federal Government) exclusive of the land and \$3,500,000 a year to operate it. The competitive recruitment of faculty from other understaffed schools might raise the latter figure. A central school should be located where there is a large low-income population to provide teaching material, but the changing pattern of medical and dental care may eliminate this source of patients in the near future. The school would then be best situated at the center of any large population mass that has easy access to the school. A secondary consideration is proximity to a collegiate and graduate school facility in the biological sciences. The Greater Little Rock area and probably the State Hospital properties adjacent to the Medical Center would be the most logical site for such a school.

A more feasible approach to the problem would be a secured arrangement with one or more dental schools in neighboring states whereby places would be maintained at these schools for Arkansas students. Thus 200 students (50 per year) could be placed in out-of-state institutions. As an incentive to increase dental applicants a total cost student loan system could be established. The loan would be repaid with interest if the recipient did not settle in an area of need within the State or could be "worked out" in an area of need. Agreements with out-of-state schools should include the actual institutional costs rather than tuition and 25 per cent over that to be used as unrestricted funds by the contracting institutions. Even if this arrangement cost the State as much as \$5,000 per student per year (\$1,000,000) it would be cheaper than maintaining a dental school.

The use of dental assistants and the decrease in certain types of dental diseases with fluoridation of both water and toothpastes will probably significantly change the types of dental needs and dentist/population ratios in the future. An agreement with nearby dental schools allows Arkansas a greater flexibility in looking forward to its future dental needs.

*Under Act 418 of 1963 and Act 267 of 1967 participants must agree to return to Arkansas upon earning the professional degree and engage in a "large animal" veterinary practice. The Committee recommends that this requirement be eliminated by proper legislative action.

**Affiliations with schools of agriculture are being effectively used in para-veterinary programs in other states.

A law department was created on the University of Arkansas Fayetteville campus by action of the Board of Trustees in 1890 but did not materialize. The Trustees then authorized a law department in Little Rock which opened in the fall of 1893, but in 1913 the Board dissolved all University connection with the Little Rock operation. The present School of Law was established as a department on the Fayetteville campus in 1924. The Evening Division of The School of Law in Little Rock was authorized in 1965 and opened in the fall of that year.

Arkansas, with a population of 1,956,000 has 2,500 lawyers, about one-half of whom are members of the Arkansas Bar Association. The United States has a population of 195,936,000 or almost exactly 100 times the population of Arkansas, with about 300,000 lawyers or about 120 times as many lawyers—Arkansas 1 to 800; United States 1 to 660. If actual practitioners are counted, Arkansas has about one practicing lawyer to 1,500 population; the United States 1 to 900. In five years, the United States added about 73,000 new lawyers; Arkansas perhaps 300 or less than one-half the rate for the country as a whole.

The demand for lawyers and legal services has profound implications for legal education. Law schools no longer perform their proper function by confining their educational programs to preparation of students to pass bar examinations designed for practitioners engaging in solo and firm practice serving private clients in traditional fashion oriented toward solving problems by the judicial process. Now they are facing new demands which will require that students be given adequate training in these new and intricate areas of law practice.

Moreover, the increasing concern in our society that legal services be available to all people at all economic levels, whether made available by private practitioners or through group practice, legal aid bureaus or by public defenders, or by other institutional means not yet devised, will require proportionally greatly increased numbers of legally trained people.

Legal education then faces two almost overwhelming demands: (1) A greatly expanded enrollment in proportion to the population generally to meet the simple manpower requirements of the legal profession in the coming years. If the State of Arkansas is to meet the demands of its own people for legal services of the nature set out, law school enrollments will not only need to double, but triple and quadruple. (2) One for much broader and comprehensive educational programs designed to train men for the complex and highly specialized tasks with which they will be presented.

Arkansas has the almost unique situation of having but one law school, the School of Law in the University of Arkansas. As part of the University, it is in a position for its students to participate in interdisciplinary studies that will be so highly essential for adequate preparation for the lawyer who will fill the more demanding roles required of him. The law students must be given an opportunity at the graduate level for investigation and research aided by the resources from other disciplines, medicine, psychology, political science, public finance, city planning, philosophy, etc. This will require faculty ratios more nearly those of graduate and medical schools rather than the 28-1 ratio currently prevailing.

The need for lawyers trained in special fields, public finance, urban planning, natural resources, utility regulations, taxation, ect., will require training in advanced courses at the graduate level in law, in Arkansas, limited perhaps to the Master of Laws Degree.

In the last five years—including this year's June class—the School of Law has graduated 288 men and women.

It is assumed that the University of Arkansas will within the foreseeable future establish a Liberal Arts campus in the central portion of the State, either through a merger with existing institutions or otherwise. The State should then plan to expand the Little Rock Division of the School of Law into full-time day and night operation. This will afford expanded facilities for legal education with resources compatible with the kind of legal education under consideration herein.

The total budget of the School of Law for the coming school year is \$541,000 for the Fayetteville and Little Rock Divisions, divided roughly \$400,000 for salaries; \$60,000 for rent, telephone, equipment, supplies, and travel; and \$80,000 for books. Salaries are paid to 37 faculty and staff including library staff. Total student enrollment is 425.

On the basis of the anticipated needs of the State during the next decade, Arkansas should plan for a law student enrollment of approximately 1,000 students, faculty of 50 full-time teachers, a law library of 300,000 volumes, and adequate clerical and administrative staff.

A faculty of the size in question would require a budget of approximately \$950,000 per annum. Administration and maintenance would require approximately \$250,000. The acquisition of books at the rate of 40,000 per year would involve an expenditure of about \$300,000 per annum until the library had needed acquisitions. Thereafter an annual book budget of \$100,000 per year should be available for continuations, additions, and upkeep.

The demands upon the profession will not be met solely by formal law school instruction. Law school training should be complemented by a program of Continuing Legal Education. The functions of Continuing Legal Education or extension courses in law for the practitioner serve the purposes of keeping the lawyer current in recent developments; in permitting lawyers to share experiences of others in meeting types of problems encountered infrequently; in refresher instruction in areas in which the lawyer may have lost familiarity; in new learning in areas of the law which are of late development or in which the lawyer received no training in law school; and in advanced training enabling specialists to handle more complex problems in their fields.

Continuing Legal Education should be a cooperative endeavor on the part of the practicing bar represented by the Arkansas Bar Association and the School of Law. Such an endeavor can be of great significance, both to the practicing lawyer and to the professors. As one person working in the Continuing Legal Education area has written, "It is not incautions to predict that post-admission legal education rather than initial law school training will achieve a place of predominant importance in the life of the profession."

A state university and law school with established patterns of adult education and extension courses should readily accept institutional and financial arrangements for Continuing Legal Education programs. Basically, it is a program of service to the people quite as much as undergraduate and professional education.

Research Activities: 117

Research and graduate education are inseparable. Financial support for research must be budgeted with the same care and consideration as given that for the instructional and other portions of the budget. The colleges and universities in Arkansas have not been able to carry on a significant institutionally supported research program because of the scarcity of funds appropriated for this purpose.

In order to move significantly into the research area, an institution must rely on Federal funds; and it appears that this will continue to be true for the foreseeable future. In order to attract Federal funds, cost sharing and matching funds are necessary, and all Federal agencies are now requiring greater financial involvement in sponsored projects than in previous years.

In addition to Federal funds, financial assistance should be available to support faculty members whose research is not necessarily agency oriented, as well as faculty members who need support in order to get new projects under way. Any institution with quality graduate programs must have financial support for those faculty members with research ability who wish to do something on their own, independently of sponsored research with its obvious restrictions and limitations.

Any active research program requires ancillary services adequately staffed by competent technicians. These

services should include a centralized computing center, an electronic repair facility, a machine shop for specialty equipment, and glassblowing facilities.

It is well established that those institutions encouraging faculty and students to engage in meaningful research by providing adequate funds for this purpose also have very good recruiting and retention rates of both faculty and graduate students. Research specialties need to be encouraged in order that Arkansas institutions can become leaders rather than followers. Extensive effort in good quality graduate education and education for the professions is impossible if the institutions are not allowed to fund independent research effort.

In planning for research supported graduate programs, financing must be based on evidence that the institution is dedicated to research and that the academic staff has a record of proven research capability and performance. The level of support should have a very direct relationship to the level of the programs offered.

Organized Research

Specialized research facilities created to serve the needs of society should also be well supported by the State. For example, the Industrial Research and Extension Center, a part of the University of Arkansas College of Business Administration, was created in 1955 to serve as the research arm for the newly created Arkansas Industrial Development Commission and other State and Local development agencies. This agency has the dual function of providing basic economic information and providing business with the latest information on management techniques and developments in science. Other agencies such as the Water Resources Research Center, The Bureau of State and Local Government which includes the City Planning and the Public Administration Divisions, Bureau of Business and Economic Research, and the Southern States Educational Laboratory perform a similar role. None of these organizations is adequately financed to do their most effective jobs. All these organizations are performing statewide functions, and the Committee on Graduate-Professional Programs and Research endorses the establishment of similar groups to meet similar needs.

It is vital to the development of the State that organizations such as the Industrial Research and Extension Center be supported to a higher degree by State funds in order that the organizations have the maximum degree of flexibility in their research and public service programs.

It is recognized that library strength is also directly related to program strength and this can become critical at the graduate level. The Committee wishes to emphasize the fact that libraries of all State supported institutions are deficient in varying degrees from moderate to critical.

Financing Graduate and Professional Education and Research in Arkansas: 118

After the Committee formulated the preceding recommendations germane to graduate and professional programs and research, it was decided to ascertain the approximate level of financial support that will be needed to implement these programs by 1980. Due to the limited time that was available to conduct this study, the Committee felt compelled to confine its projected costs to broad categories rather than the many separate parts. None of the subsequent figures has been adjusted to reflect the 1980 price level; consequently, the inflation factor should be introduced at the time of appropriating the necessary funds. Furthermore, these cost figures are based on the most conservative projection of graduate student enrollment by 1980 as indicated in a foregoing section of this report.

Projected 1980 Level of Financial Support Needed for Master's and Doctoral Degree Programs: 119

Predicated on the student-credit-hour dollar allowance for instructional salaries prescribed by the formula of the Commission on Coordination of Higher Educational Finance for the 1970-71 biennium with an added factor for related items conventionally embraced under "instruction and departmental research," it was determined that the estimated costs for graduate instruction will be as shown below.

The reader is cautioned that the total program cost of \$9,723,600 encompasses only the category of instruction and departmental research. Expenditures for libraries, physical facilities, and organized research related to doctoral research, etc., have been excluded. Library costs were discussed in the previous section.

Instructional Level	Projected 1980 Enrollment	Instructional Cost Per Student	Program Costs
Master's	3,148	\$2,400	\$7,555,200
Doctoral	<u>417</u>	5,200	<u>2,168,400</u>
TOTAL	3,565		\$9,723,600

Graduate programs will continue to be one of the most expensive aspects of an institution of higher learning's instructional program due to the emphasis on research, the need for a small student/faculty ratio, and dependency on expensive equipment and library materials.

Libraries: 120

One of the most essential components of a healthy graduate program is a library. The Library Committee has already disclosed the significant deficiencies that prevail in the college and university libraries in Arkansas. The Committee on Graduate-Professional Education and Research strongly endorses the immediate need to correct this harmful situation since the survival of the graduate programs is dependent on strong libraries.

Again, considering the present Commission on Coordination of Higher Educational Finance formula rate for allocating library funds and using the projected enrollment at the master's and doctoral degree levels, it will be necessary to spend approximately \$213,900 for graduate library acquisitions in 1980. In addition, the annual catch-up funds needed through 1980 to eliminate the library deficiencies at the undergraduate and graduate levels is between \$596,306 and \$893,372. The Committee urges adoption of the latter figure as the criterion so that the standard of the Association of College and Research Libraries can be met. Thus, the 1980 expenditures for expansion of graduate library holdings and filling the deficiencies at all levels will be \$1,107,272. It is reiterated that inflation has not been treated in computing these figures which means that probably larger expenditures will be required by 1980.

Professional Programs: 121

To provide the necessary buildings and equipment to meet the projected medical education needs of the State in 1977, a report by Lester Gorsline Associates estimated \$86,200,000 will be required. State appropriations of \$30,000,000 over the next decade should provide enough matching funds to attract sufficient Federal money to attain a State-Federal contribution of \$86,200,000. In this case, Lester Gorsline Associates increased 1967 dollars four per cent each year to 1977 in an effort to account for inflation. Additional expenditures will be required by 1980.

The cost of veterinary medicine and dentistry education cannot be determined until the actual per student cost at cooperating out-of-state institutions can be identified. Regardless of cost, it will be appreciably less than the size of investment that would be required to initiate such programs within Arkansas.

Legal education must grow and the facilities and staff expanded as described in an earlier section. The estimated cost for construction by 1980 will be \$2,750,000. In 1980, the estimated operating budget for the Law School will be approximately \$1,500,000.

Financial Assistance for Graduate Students: 122

In today's educational market place, universities must compete for the most able graduate students. Although the academic stature of an institution of higher education is one of the drawing attractions, it is not the only one. The ability to offer competitive financial inducements in the form of fellowships and assistantships often determines the quality of graduate students at the university.

Since graduate assistantships are payments for service, they should be regarded as benefiting both the student and the school. The recipients usually serve as junior faculty members, teaching assistants, or research assistants. With the increasing shortage of senior faculty to teach lower division courses, these graduate assistants often provide vital services to the operation of a college or university. In addition, this experience enables the graduate student to fuse theory with practice by immersing him in a practical learning situation concomitant with classroom theory.

It has been estimated that the median stipend for graduate fellowships and assistantships in 1980 should be \$2,700. In 1965, according to a nationwide survey that was conducted by the United States Office of Education, 43 per cent of all graduate students in the United States received some kind of stipend. The distribution embodies 56 per cent having received fellowships, 25 per cent received teaching assistantships, and 20 per cent had research assistantships. Assuming that approximately 50 per cent of the graduate students will be receiving stipends by 1980 and referring to half of the projected Arkansas graduate student population at that time (1,783), the State of Arkansas should be prepared to allocate adequate funds for this purpose.

Financial Support for Research: 123

Research is an integral and essential component of graduate and professional education. Without the vigorous pursuit of new knowledge, graduate programs become weak, obsolete, and ineffectual. In an effort to assure the vitality and integrity of graduate and professional education, the Committee recommended that the proposed Advisory Committee on Graduate and Professional Education construct a formula for prescribing the amount of the annual appropriation for institutionally sponsored research, exclusive of organized research bureaus and agricultural experiment stations. This formula should be sensitive to the variables that influence the research function, such as teaching loads, level of instruction, and other germane factors. Until a formula has been developed, it is not possible to estimate a projected cost for 1980.

The Role of the Private Colleges and Universities in Arkansas' Higher Education Endeavor: 124

On April 2, 1968, each of the 13 private college Presidents of Arkansas was contacted by letter and asked to reply to the following question:

"What should be the role of the private liberal arts college in the development of graduate and graduate-professional education in the State of Arkansas?" (This is interpreted as education and training beyond the baccalaureate level but includes the undergraduate preparatory aspect.)

While not all of the 13 college Presidents responded to the request, the following statement is a summary of the findings presented in those replying to the question.

The private institutions of Arkansas are severely limited by the financial resources available and the fact that the costs of higher education have increased so much faster than the potential income for private institutions. Consequently, the private college will gradually, and with great difficulty establish only strong master's programs and colleges in Teacher Education, Business, and the Arts and Sciences. The private Liberal Arts college should not make an effort to establish graduate programs until such a time as they have achieved undeniably excellent undergraduate programs. If at that time they have the necessary resources to support graduate programs of their

own, then there is no reason why they should not initiate them and apply for accreditation through the proper channels.

The apparent consensus of the responding Presidents is that it will not be financially feasible to develop other professional schools such as Law, Engineering, Medicine, Dentistry, Pharmacy, and others in the foreseeable future. These must be provided by public funds. The ministry will remain primarily a role of the private institution with advanced degree programs in the ministry being carried out only by private institutions which have the necessary faculty and resources for such a commitment. In the pre-professional and professional areas, it is anticipated that the private Liberal Arts college and will expand its offerings horizontally rather than vertically. Currently one such college has 10 rather large and growing pre-professional curricula and more will be added.

The private Liberal Arts college is a basic ingredient in undergraduate pre-professional and professional preparation for society and its position should be enhanced and improved for the betterment of society. Because of financial limitations for expansion into graduate curricula, private Liberal Arts colleges must, of necessity, emphasize first a strong undergraduate program. They have the ability to do an excellent job in undergraduate preparation for professional programs, and they should emphasize this type of study. In addition such program development can help take some of the load from public institutions which can provide the professional work itself. Therefore, larger universities might then concentrate on more advanced degrees in their graduate schools; however, there is no reason why they should not continue the level which has been suggested for the private Liberal Arts college.

The first amendment of the Federal Constitution set the pattern for separation of church and state and ultimately prevented private schools from sharing income from public sources. The first century of our republic was required to fully establish the first amendment. During the course of the past half century, however, the interpretation of the first amendment has changed concerning the possibilities of Federal support for private institutions.

The history of the century records numerous situations where public money has been proposed to support private education. In several instances these proposals have become actual practices on the basis of the "child benefit theory." Higher education, likewise, has shared in public monies where it has been demonstrated that the general welfare of the public could be improved. All of this has been done in light of the need for more adequate support of private institutions whose sources of income have been limited.

Another vital factor is that private institutions today make up about 61 per cent of all current higher educational institutions in the Nation, but handle only about 32 per cent of the total student body. (In Arkansas is 26 per cent). The public colleges, however, have expanded to the point that they handle over two-thirds of the Nation's college students but number only about one-third of the higher educational institutions.

A cursory look indicates that private institutions should have a better opportunity to share in the total college student body. Lack of adequate finances with rising costs have forced private schools to increase tuition to the point that the students go to public colleges in order to survive financially. If the surge of students from the private colleges to the public colleges continues at the present rate, the private college will be in very difficult financial straits within a short period of time.

This National concern among educators regarding the position that private institutions are to occupy in the future educational programs of this country has led to the search for additional sources of revenue for the support of private institutions of higher education. Should additional sources of income become available, specifically Federal Government funds, it is quite probable that private institutions will be able to expand their programs at the graduate level much more rapidly than what is now anticipated.

Further, it is believed that careful operation and planning on the part of the State institutions with the private institutions will greatly enhance the usefulness of the existing graduate and future graduate programs

developing in private institutions. It must be realized that duplication can be expensive and inevitable competition could destroy practical application of efforts to provide adequate graduate training whether it be in either a private or state institution. The merits and limitations of each type of institution must be considered in all cooperative agreements between private and public institutions for the benefit of education and nothing else.

The Committee recognizes the value and impact of the private Liberal Arts college over the years to American society.

The Committee also recognizes the current financial problem facing the private Liberal Arts college to the point that it is unlikely that it will be able to develop advanced educational and professional graduate programs beyond the bachelor degree level except in a few selected areas. The exception would be when new sources of income of a permanent nature would become available.

Recommendations on Graduate-Professional Programs and Research: 125

General Recommendations

1. In planning the expansion of graduate and professional education, consideration should be given to the resources of the State, the existing and foreseeable future needs, the location of population centers, and the presence of established institutions of higher education.
2. New programs should be permitted to develop only if they do not directly weaken programs already in operation, and if they respond to demonstrated needs of the State and Nation.
3. Continuous attention should be exercised to ascertain any programs that should be eliminated due to the cessation of need.
4. Provision should be made for the expansion of graduate and professional education and research activities in Central Arkansas.
5. The expansion of graduate education in other areas of the State also should be pursued where the need justifies such growth.
6. The Commission on Coordination of Higher Educational Finance should be granted the authority to approve all graduate degree programs in the State supported colleges and universities, and the name of this group should be changed to the "Commission on Higher Education."
7. The Commission should encourage the development of cooperative graduate programs at both the master's and doctoral levels.

Recommendations for an Advisory Committee on Policies Concerning Graduate-Professional Education and Research

8. A permanent Committee on Graduate and Professional Programs and Research should be established.
9. This Committee's function should be to serve in an advisory capacity to The Arkansas Commission on Coordination of Higher Education Finance with respect to policies concerning graduate and professional education and in research.
10. Membership of this Committee should include representatives from each State supported institution of higher learning. These representatives should be appointed by the Director of the Commission from a list provided by the President of each institution. In order to assure a balance of competencies and external expertise, additional members may be selected who will represent special professional, educational, and research areas.

Recommendations for Master's and Specialist Degree Programs

11. A graduate programs' objectives, the needs of the region, the availability of essential resources, and the ability to satisfy acceptable standards shall determine whether a graduate program is to be conducted at a specific institution.
12. The following are the recommended criteria for master's and specialist degree programs:
 - A. Each program shall be dependent upon full-time faculty in the primary department.
 - B. The faculty shall be comprised of those persons who have demonstrated competence to conduct graduate work in their particular field and who have also manifested research skill. All graduate faculty shall hold the appropriate terminal degree or its equivalent. Competence shall be judged by members of the graduate faculty, the graduate dean, and the academic vice president.
 - C. The size of the graduate faculty shall be adequate to enable each student to complete the required course work for his degree within one calendar year while concurrently limiting the faculty teaching load to nine semester hours or less during a nine-month period. Course offerings which are exclusively for graduate students should be required for at least 50 per cent of each student's graduate program.
 - D. The student/faculty ratio should not exceed the ability of the department to render adequate scholarly consultation and research guidance to each student in the program.
 - E. Funds shall be available in such quantity as to provide the commonly agreed upon basic equipment, library materials, and other essential items for each program.
 - F. Financial support shall be adequate to maintain faculty salaries for all ranks at such a level that the institution's average salary in each graduate program will be competitive on the National scale. It is suggested that the level be competitive with institutions offering a similar program.
 - G. Physical facilities (classrooms, laboratories, faculty offices, and library) shall be of such quality and adequacy as to assure the attainment of instructional and research standards defined by the institution and its regional and professional accrediting agencies.
 - H. Research is recognized as requisite to the growth capability and effectiveness of instruction at the graduate level. To foster this facet of a graduate program, sufficient time, funds, and facilities should be available for faculty research. It is advocated that there be established an institutional fund for faculty research which is administered by the graduate dean and a committee composed of members of the graduate faculty.
 - I. No graduate program should continue which does not graduate a sufficient number of candidates during any given five-year period.
 - J. Before initiating a new program, it is suggested that at least two off-campus consultants, who are recognized in the field, be engaged in an advisory capacity.
 - K. Standards of faculty and courses in ancillary fields should be of sufficient strength to support the major field.
13. The foregoing standards should be regarded as minimal. Whenever a proposed graduate program is not able to satisfy these criteria, it should not be established, nor should deficient programs be permitted to continue.

Recommendations for Doctoral Degree Programs

14. Advanced graduate programs at the doctoral level are essential in fulfilling the State's needs in the various professional and other occupations. In an effort to promote standards of excellence at the doctoral level, it is recommended that no programs should be permitted to operate which fail to comply with the subsequent minimum standards. The number of programs that will be allowed to exist in the State shall be determined by the magnitude and breadth of the need, availability of resources, and the number of institutions that can fulfill the established standards. The criteria are as follows:
 - A. Approval for doctoral programs must be contingent upon demonstrated availability of resources at such a level that the prescribed standards of excellence can be attained. It is advocated that the financial support of a doctoral program must be considered to be an integral part of the total instructional financing of a university rather than the financing of an academic appendage superimposed on other programs. This requires distributing a university's resources among its diverse services according to the aims and objectives which have been established by the faculty, administrative personnel, and Board of Trustees. It is incumbent upon an institution of higher learning to develop a balanced curriculum between its various levels of programs. It is recommended that new programs which will deprive existing ones of strength and effectiveness not be created; however, it is recognized that an institution may elect to restrain the expansion of programs in one area or at one level to permit the directing of resources to another area and/or level.
 - B. A doctoral level program shall be based on accredited master's degree programs in the same and related areas.
 - C. The program shall be dependent upon a strong cadre of full-time faculty in the subject area who have been recognized as possessing competency in teaching and research at the doctoral level. The faculty who are responsible for advising and directing research programs of Doctor of Philosophy students must have demonstrated research ability beyond the minimum requirement for their own doctoral degree.
 - D. The size of the faculty in a doctoral program in any field shall be sufficient to enable a full-time student without academic deficiencies to take all the required course work within a three-year period beyond the bachelor's degree.
 - E. Faculty in programs in ancillary fields must show strength beyond the minimum required for the faculty in master's degree programs.
 - F. The student/faculty ratio should not exceed the ability of the department to render adequate scholarly consultation and research guidance to each student in the program.
 - G. In recognition of the extensive individual guidance which must be rendered by the faculty to doctoral candidates in their research and to the imperative of faculty research to sustain their competency, the maximum teaching load should be restricted to the extent that each faculty member has adequate time to provide these services.
 - H. The faculty salaries shall be sufficient to attract qualified personnel for doctoral instruction and research. These salaries shall be competitive with institutions offering a similar program.
 - I. Physical facilities (classrooms, research equipment and laboratories, library materials, faculty offices, etc.) shall be of such quality and adequacy to assure the attainment of instructional and research standards defined by the institution and its regional professional accrediting agencies.
 - J. Funds should be available to permit doctoral candidates to serve as either teaching or research assistants.

- K. There should be adequate enrollment in the program to provide a desirable scholarly and student climate; consequently, for the most part, no doctoral program should continue which does not graduate an average of two candidates per calendar year during a three-year period. This requirement should not be applicable to new programs until after their sixth year of operation.
- L. In the process of preparing for the establishment of a doctoral program, at least two persons from off campus, who are recognized in the field being considered, should be engaged in a consultative position. It is recommended that the North Central Association of Colleges and Secondary Schools or the Council of Graduate Schools in the United States be consulted for suggestions.

Recommendations for Programs in Professional Fields

- 15. Before developing new professional programs, the present programs should be strengthened; and the feasibility of establishing consortiums or other cooperative arrangements between the State of Arkansas and other states should be carefully considered.

Recommendations for Human Medicine

- 16. It is evident that the University of Arkansas Medical Center is facing a financial crisis, but a similar statement could be made of almost every university medical center in this country. In the case of Arkansas, however, the problem is comparatively more acute because of the limited resources of the State and the great demands placed upon it by all segments of the rapidly growing system of higher education.

At the moment it appears unlikely that sufficient State revenue will become available through traditional channels to meet the crucial needs of the Medical Center in the years immediately ahead. Under the circumstances, every possible additional source of revenue should be given most careful consideration. It is therefore recommended that:

- A. Financial assistance for the support of beds for the indigent sick be sought from the City of Little Rock and Pulaski County. There is substantial precedent for contractual arrangements of this nature; e.g., the University of Alabama Medical Center receives from Jefferson County \$3.5 million annually for these purposes.
- B. The number and percentage of the hospital's private patients be increased as rapidly as possible to the point where they represent half of those receiving care. This could be accomplished by conversion of some of the present charity beds to semi-private and private beds and the activation of the presently unused 120-bed area for these purposes.

Obviously such a move requires one-time funds for structural alteration and additional equipment and increased annual operating funds for professional staff. The advantages of such a decision include the following:

- 1. More patient material will be available for the education and training of medical and other health sciences students and interns and residents.
- 2. Participants in both the undergraduate and postgraduate programs will have exposure to a mixture of patients more comparable to that they will encounter in private practice.
- 3. It will be good preparation for the inevitable change in the character of the hospital as Medicaid becomes effective. At that time the so-called charity hospital must compete with all nonprofit hospitals for patients.
- 4. The increased revenue to the institution for the professional services rendered to paying patients would be available to make salaries more competitive and to maintain and improve the physical facilities.

17. It is recognized that there are unique local obstacles in Arkansas and Little Rock that will make this transition difficult. It is recommended that the administration, faculty, and staff of the University of Arkansas Medical Center arrange a seminar or a series of seminars with guest participants from neighboring state university medical centers that admit substantial numbers of private patients to their fully owned hospitals. Likely invitees might include Missouri, Mississippi, Oklahoma, and Alabama.
18. A comprehensive study should be made of the organization, operation, and financing of the Medical Center of the University of Arkansas and its functional units. Emphasis should be given to the adequacy of the present financial base of the Center to meet in a qualitative manner the responsibilities expected and required of the Center in teaching, research, and care of patients. In the recommendation of an adequate financial base for the Center, this study should consider carefully all sources of additional income:
 - A. Appropriate level of State support for the teaching and research functions.
 - B. Appropriate level of State subsidy for care of indigent patients.
 - C. Enhanced income from private patients by allocation of a significant number of hospital beds for such patients.
 - D. Increased income from professional fees to full-time staff for private patient care.
 - E. Potential of private gift support for enrichment of the Medical Center activities.
 - F. Possible financial support from local governments for support of patient care for indigents from their locales.
 - G. Potential of increased funding from Federal grant agencies.
19. A detailed study should be made of the costs of operation of the University Hospital to (a) ascertain fiscal effectiveness of the present operation and (b) make recommendations concerning fiscal control and the most effective procedures for billing and collection to maximize hospital income.

Recommendations for Veterinary Medicine

20. The State should not establish a School of Veterinary Medicine in the foreseeable future, due to large investment that would be required. The small number of potential students would result in a high per student cost. It is recommended that cooperative arrangements be pursued further with other states that currently have or plan to operate programs in veterinary medicine for the purpose of enrolling Arkansas students in these programs.
21. Compensation to cooperating states should be based on the per student actual annual cost plus an additional 25 per cent for unrestricted use.
22. Loans should be available to students from Arkansas to cover other expenses germane to veterinary medicine education.
23. Programs in veterinary technology should be founded in Arkansas to alleviate an anticipated shortage of veterinary technologists.

Recommendations for Dentistry

24. The State of Arkansas should not establish a School of Dentistry in the foreseeable future. A high per student cost resulting from the small number of potential students shows that cooperative education arrangements with other states should be made.

25. Compensation to cooperating states should be based on the per student actual annual cost plus an additional 25 per cent for unrestricted use.
26. Loans should be available to students from Arkansas to cover other expenses germane to dental education.

Recommendations for Legal Education

27. The State should plan to expand the Little Rock Division of the School of Law into a full-time day and night operation by 1980.
28. The Law School support should be expanded to meet an anticipated enrollment of 1,000 students on the two campuses prior to 1980 with a total of 50 full-time persons on the faculty.
29. The faculty to student ratio should be 20 to one by 1980.
30. The Law Library should contain at least 300,000 volumes by 1980.

Recommendations for Research Activities

31. Research and graduate education are inseparable. Without a vigorous and ambitious research program the instructional endeavor, especially at the graduate level, will be seriously jeopardized because it will not attract competent faculty or students. Furthermore, the instructional program will fail to respond to needs which are continuously developing in society. To foster instruction and research, the following recommendations are being proposed:
 - A. State funds should be made available on an annual basis to support faculty and graduate student research.
 - B. State research funds should be used as much as possible for matching purposes to attract research grants.
 - C. State funds should be used to support in the entirety research that is not necessarily agency oriented.
 - D. The appropriation for institutionally sponsored faculty research, excluding organized research such as research bureaus and experiment stations, should be made in accordance with a formula approach to be developed by the Advisory Committee on Graduate-Professional Programs and Research.
 - E. Each institution of higher learning should ascertain how funds may be used to foster its research program so as to recognize Federal commitment to research and the large amount of funds appropriated for this activity.
 - F. A statewide grant officer should be appointed to the staff of the Commission on Coordination of Higher Education Finance to represent all of the State's colleges and universities in Washington. This officer should have offices in Little Rock and Washington, D. C. His role should be restricted to a voluntary relationship with each institution to assist with the identification of Federal and private funds to foster institutional objectives and to assist with the preparations of proposals.
 - G. Special tax advantages should be given by the General Assembly in addition to those now extant to encourage individuals and industry to contribute more to higher education, especially for research and development.
 - H. Specialized research facilities, created to serve the needs of society, should be well supported by the State. Specifically, the fields of human behavior, economic and resource research.

- I. The colleges and universities are encouraged to become actively involved in the Research and Development Centers and the Regional Education Laboratories and to sponsor summer research fellowship for faculty members.
32. All college and university libraries should be brought up to the quantitative standards of the Association of College and Research Libraries by 1980. To begin graduate and professional programs, a modern library collection is an absolute necessity for an educational institution. None of the libraries in the State supported institutions of higher learning have collections of adequate size and quality to have a full program of professional and graduate courses.
33. The State should establish a fund for the purpose of providing financial assistance to graduate students. In 1965, 43 per cent of all graduate students in the United States received stipends of some kind (56 per cent had fellowships, 25 per cent had teaching assistantships, and 20 per cent were research assistants). It is recognized that some support is obtained from the Government and private foundations and that many students receive assistance through teaching and research which is funded through the regular appropriation; but it is necessary to have some free funds for attracting able scholars.

The consultants and members of the Coordinating Committee are in general agreement with the recommendations of the Committee on Graduate-Professional Education and Research and strongly recommend that these recommendations and the Committee report itself serve as a guide to the Commission on Coordination of Higher Educational Finance and the Legislature in developing a strong comprehensive program of graduate and professional education in the State.

Present and Projected Status of Extension and Public Service Programs: 126

For some time it has been clear that knowledge in many different fields of human interest is advancing at a phenomenal rate of accumulation. As a result, new emphasis has been placed on the fact that education acquired during four years of an undergraduate program and in the various graduate-professional education fields must not be considered a static body of knowledge. Education is a life-long process, and education acquired at the undergraduate level of higher education must continually be brought up to date. The development of programs and services to fill these needs gave rise to current extension and public service programs in institutions of higher learning throughout the Nation.

For many years higher education served only those who attended it as full-time students working towards baccalaureate, professional, and graduate degrees. Then through the extension of academic courses, the universities and colleges began to meet needs of others—off-campus students, part-time students, and adults whose education had been interrupted. Gradually the extension function was broadened to serve even more—those seeking particular studies or courses apart from or beyond degree sequences; those requiring remedial courses; those with special personal interests; and those with vocational and professional skills and knowledge calling for updating and upgrading. College and university extension also began to provide educational and training programs in response to calls from corporations, governmental units, voluntary associations, and other formal organizations. In recent years, universities or consortia of universities and colleges have pioneered in serving society at Local, Regional, National, and International levels.

At one time, the universities and colleges could regard extension as primarily geographic and temporal—giving regular campus courses off campus, in other places and at other times. Today the extension function and responsibility have become more complicated and demanding, calling for the universities and colleges deliberately and experimentally to discover the needs for their services and to extend their scope and utility by developing new methods and new units and by providing new learning situations for individuals, for organizations and for whole segments of society. Educational innovation has become one of the chief contributions of the extension units of colleges and universities. They long have been concerned with developing and using new methods and foci of instruction such as correspondence study, method demonstrations, extension

centers, county extension officers, residential centers, farm and home development, community consultations, radio and television courses, programmed instruction, and innovative patterns of independent study. Along the cutting edge of social change and demand, extension has given impetus to the development of new disciplines, new departments, and even new schools within the colleges and universities.

Extension is one of the primary functions of many colleges and universities, and it will become primary for many others. The extension function should evolve within an institution as the result of deliberate planning and the broad involvement of institutional faculty and staff.

This traditional prospective for continuing and extension education has direct and real meaning to Arkansas. If higher education remains integral to a state's economy, political and social growth, then considered attention to the extension of education opportunity in line with needs of that state is very much in order. Therefore, this section of the report rests upon the necessity for the State to take strong action in assuring leadership for the growth and improvement of off-campus higher education. In other words, the State has an obligation to assure appropriate education not only to youth on campuses but to the adult population in general and to emerging centers of growing population and expanding industrial, technological, and financial activities.

To date the colleges and universities have made an effort to provide extension and public service programs. This is quite evident since formal credit extension work is provided by all State institutions and public service functions are provided by both public and private institutions.

The extension efforts of State institutions are generally uniform in that all, in some degree, offer credit work at off-campus locations and provide off-campus noncredit activities as need arises. According to the "Role and Scope" studies, 2,861 persons were enrolled in formal extension courses during the 1966-67 school year.

A total of 13,222 correspondence courses was issued by the University of Arkansas, State College of Arkansas, and Henderson State College in the same period. On June 30, 1967, the correspondence department of Henderson State College began a phase-out in order to release instructor time for other institutional purposes. A total of approximately 40,000 college hours was earned by extension and correspondence from January 1 to December 30, 1967.

Except for agricultural extension, all extension work must be conducted so as to meet the financial requirements for each activity.

All State institutions, and to an extent the private schools, provide public services in the form of seminars, workshops, conferences, demonstrations, and consultative assistance. Physical facilities are provided for noncollege related activities on a space available basis. All institutions provide speakers for the full range of public functions. However, in general, the State has a relatively limited program in both number and scope. In addition these programs have suffered serious financial limitation.

In addition to the foregoing programs the University of Arkansas through its Cooperative Extension Service in Agriculture and Home Economics offers programs and services which emphasize resource development in the areas of agricultural production, marketing, youth development, family living, and other competencies.

It appears doubtful that the existing extension and public service programs can meet the needs for such programs in the State. The educational needs of adults and of groups in Arkansas are so vast and varied that no single institution or even combination of institutions can hope to meet all requirements. Priorities and goals must be established within the framework of the purpose and nature of each institution and of its educational resources.

The diversity of demands and the multiplicity of choices can be narrowed and more sharply focused if the following can be accepted as a general statement of relevant and desirable goals, within which each institution may make its own selection and commitment: 127

1. To provide courses, often at night and off campus, leading to undergraduate degrees for adults who are not able to attend full-time, daytime campus programs. Extension programs should differ from customary degree sequences not in level or in quality, but in teaching methods and in curriculum. Many should include provisions for independent study, for credits earned by examination or by the evaluation of knowledge and skills gained through work experience or self study, and for waivers of usual residential requirements.
2. To provide opportunities for adults to pursue post-baccalaureate studies leading to professional or graduate degrees, often without full-time residential study. Such programs should offer degrees or new curricula especially for those adults, including teachers and other professionals, who have needs and interests that justify either great specialization or greater generalization.
3. To provide opportunities for adults to continue development as individuals and as citizens, including their general liberal education, their increased understanding of changing personal relationships, and their wise use of recreational and discretionary time to make themselves wiser consumers, more effective workers, better family members, and more responsible members of their communities. This cluster of goals implies credit-free courses of many kinds and at different levels and opportunities to share in individual or group residential study programs.
4. To give all full-time residential students an understanding of the importance of continuing their educations throughout their lives.
5. To provide opportunities for individuals of all ages to continue their vocational or professional educations, beyond and apart from their degrees, through various credit-free seminars, colloquia, short courses, conferences, institutes, and through returning from time to time for independent or directed study as members of the university community.
6. To provide and to expand research and training programs for broad areas of concern such as agriculture, labor, business, engineering, medical and public health, and public and social services.
7. To assist and to work directly with communities and with community institutions—Local, Regional, National, and International—in identifying the research and teaching resources of the colleges and universities and the human and material resources of the community, with special emphasis on developing abilities to resolve urgent problems affecting every aspect of contemporary life.

Members of the Committee on Extension and Public Service Programs feel that there is no single right way for a college or university to organize itself to meet its commitment to extension and public service activities. However, it is felt that if the goals for such programs as expressed above can be accepted, that the following guidelines and recommendations will assure the development of a quality program in the State.¹²⁸

1. Extension should be accepted as a primary function of the colleges and universities, and these services should be substantially increased by the various institutions of higher learning.
2. Governing boards, central policy makers and administrators, and faculties of the institutions should understand the goals of the total program of extension. This program should reflect the level of quality of the institution itself. The institutional commitment must be made clear. Adequate resources must be allocated.
3. The institutions of the State must plan carefully and comprehensively for their extension programs. These programs should be coordinated at the State level under the auspices of the Commission on Coordination of Higher Educational Finance but with an advisory committee representative of the various extension and public service institutions in the State.

4. The entire extension effort should also be coordinated within the college or university. Strong leadership in the administrative structure is mandatory if this coordination is to be achieved. A comprehensive approach to some of the complex problems extension is asked to deal with becomes impossible without institution-wide and State coordination.
5. The size, nature, and depth of involvement of the large and heterogeneous extension student body and other clientele should be analyzed constantly. This evaluation should guide extension policymakers and other administrators in formulating institutional commitments in terms of the needs of the individuals and the segments of society the institution seeks to serve.
6. Extension should not be expected to operate on a self-supporting basis. When extension must be self supporting it is likely to serve well only the few who can afford to pay for it, and it will not serve at all the many whose needs are of greatest concern. Extension must have consistent financial support from State funds to be effective in meeting community and social needs.
7. The college or university must be creative in adapting program content and format to specific objectives, in finding new equivalents for traditional requirements, and in the methods required to meet its extension commitment. These conditions can be met with full respect for institutional standards of quality.
8. More Statewide, Regional, and National programs of extension must be developed. Colleges and universities, the Commission on Coordination of Higher Educational Finance, and the proposed State Advisory Committee should plan jointly to meet pressing needs and to develop the appropriate mechanisms and resources for special purposes.
9. The college or university must be prepared to cooperate with Government agencies—Local, State, and National—and with private organizations in the conduct of educational programs essential to the achievement of social goals. Within the framework of this partnership Government and private organizations should pay the cost of specific programs, and should also provide continuing financial support to develop the capability of the institutions of higher education to provide the services.
10. A comprehensive coordinated statewide plan for continuing education and public service in Arkansas should be developed under the auspices of the Commission on Coordination of Higher Educational Finance. It is recommended that the Commission be requested to conduct a study in depth of the State's immediate and long-range needs for extension and public service programs and that funds for this purpose be provided by the Legislature.
11. The designation "extension" is inappropriate and does not properly describe the diverse activities involved in such programs. It is recommended that the coordinated statewide program be referred to as the "State Program for Continuing Education."
12. Courses offered in approved off-campus programs should be accepted as legitimate credit in all State institutions when appropriate in terms of major and professional requirements.
13. There must be a substantial increase in the amount of State funds allocated to extension programs in the future.
14. A statewide coordinating committee on extension made up of representatives of public and private institutions of higher education in Arkansas and a representative from the State's educational television authority should be formed and should hold regular meetings to evaluate present and proposed programs and serve in an advisory capacity in the general area of extension and public service.
15. A majority of the students enrolled in junior college community service programs have fees reimbursed to them by their employers. It is felt this is a determining factor in the success of suggested classes. If fees are

borne completely by the individual and not reimbursed, the response is not nearly as great. The program would be of much more benefit to the community if fees could be reduced and operating expense provided, at least partially, by regular appropriations. It is indeed a strange paradox to emphasize the need for continuing adult education, of the noncredit type, and at the same time withhold financial aid from such programs.

16. There are many areas usually identified as the reasons why people need enlightenment to fill the darkness, the inadequacies, and the deficiencies in their lives. These are the vital and real reasons for community service programs and should be recognized as valid justification for programs in every college in the State of Arkansas. Noncredit classes should be made a part of the total program on every campus.
17. A basic problem in the community service and continuing education program is the inability to use regular teaching faculty to teach extension classes except on a reduced load basis. State legislation should be initiated to allow some type of payment for instruction in these classes in addition to regular salary for the normal teaching load. This is a common and effective practice in most other states.

It is obvious that one important extension and public service agency, the Industrial Research and Extension Center, has been left out of the preceeding discussion. This Agency is currently offering a wide range of programs in the general areas of extension and public service.

The Industrial Research and Extension Center is an economic research and extension education division of the University of Arkansas' College of Business Administration. Its headquarters are in Little Rock at the University of Arkansas Technology Campus and field offices are located in Fort Smith, Jonesboro, and Magnolia.

The Industrial Research and Extension Center has three major responsibilities:

1. To conduct research to meet the immediate and long-range needs of Arkansas' economic development program.
2. To provide information and advisory service on a wide range of business and related problems.
3. To bring to the State the latest management techniques and technical information needed to expand Arkansas industries.

Since 1955, when it was established, the Industrial Research and Extension Center has steadily expanded its efforts in fulfilling these responsibilities, and now fills an important role in support of Arkansas' economic development.

At its inception the Industrial Research and Extension Center was primarily concerned with conducting basic research for industrial concerns that were considering location or relocation in Arkansas. This was done with the close cooperation and coordination of the Arkansas Industrial Development Commission. Almost immediately, however, the Center broadened its scope to include research to meet the long-range as well as the immediate needs of Arkansas' economic development programs. More recently its activities have steadily expanded to include the providing of information, counseling, and advisory services on a wide range of business and engineering problems, and to bring to the State's businessmen the latest managerial techniques and technical information. These functions were performed primarily through the person-to-person case study technique and group seminars. It might be pointed out, however, that with the relatively small staff of the Industrial Research and Extension Center a limited number of research projects, case studies, and seminars are possible to conduct. For this reason, it would be proper to state that the Industrial Research and Extension Center conditionally serves the entire State in the above functions.

The Industrial Research and Extension Center maintains a professional staff of approximately 26 persons, supported by consultants from both within and without the University system, to study, plan, and implement

economic programs of assistance. The assistance is available to communities, the economically disadvantaged, business enterprises, regional and local development agencies, and individuals whose objectives can be realistically related to the objectives of the Center.

Research

The Research arm is composed of the Industry and Market Feasibility Section, the Natural Resources and Public Utility Section, the Government and Public Affairs Section, and the Human Resources Section.

Major emphasis has been placed upon research needed by numerous agencies in their economic development work. Studies are made of economic conditions and trends to more accurately evaluate progress, to investigate opportunities for development, or to find answers to specific problems. This work is done in cooperation with the Bureau of Business and Economic Research, the Department of Agricultural Economics and Rural Sociology, and the City Planning Division on the Fayetteville campus. Requests for studies and information are received from the Arkansas Industrial Development Commission, the Arkansas Planning Commission, the Arkansas Legislative Council, the State's several Economic Development Districts, and other development agencies (both public and private) to provide information for economic and business policy formulation.

'That variety is the byword' in research is borne out by two publications released in the past year: **Wholesale Market Demand for Catfish** and **Retirees and Regional Economic Development**.

Extension

Extension is made up of three distinct departments: Education Programs, Field Service, and Information. Seminars, short courses and other relatively formal classroom sessions make up the Education programs. Field Service work generally is individual on-the-site business case studies which evaluate business procedures. The information phase is primarily communicating new and time-proven business methods through the written word.

Through its extension arm, the Industrial Research and Extension Center is in a unique position to reach people until now unfamiliar with extension services offered by colleges and universities. As the Agricultural Extension Service has rapport with the State's farmers so has the Industrial Research and Extension Center with the State's businessmen. The in-service training of businessmen is one area of education where a great chasm has developed and will continue to widen unless proper measures are taken. Even with the proposed community junior college system in effect, a need would still exist for courses tailor-made for the businessman with operating problems.

Recommendations

1. The Industrial Research and Extension Center, together with other institutions, should seek to develop and offer a broad-based program of information dissemination and assistance service dealing with the total spectrum of needs and demands of business, commerce, and industry. In conducting the activities, the Industrial Research and Extension Center should continue to utilize a variety of talents representing the several disciplines needed to provide a broad and competent service.
2. To support the conduct of such a broad-based program, the Industrial Research and Extension Center should utilize funding and personnel from a variety of sources. Funding should continue from Federal and State sources as well as grants for specific research projects. Personnel should be available from all the State's colleges and universities as well as out-of-state consultants for maximum educational effort.
3. In administering its program, the Industrial Research and Extension Center should continue to cooperate with other State agencies, educational institutions, and Federal agencies sharing an active concern for economic development. Activities should be so organized as to secure a maximum level of participation with minimum duplication of services.

4. In addition to the traditional noncredit classroom education, the Industrial Research and Extension Center should utilize the educational television network of the State for presenting subjects of general interest (such as Supervisory Development or technology reviews in subjects such as work measurement, time and motion study, welding techniques, etc.).
5. The Center should establish a film lending library utilizing technical and managerial films.
6. The Industrial Research and Extension Center has operated a field service program since the initiation of activities under the Office of State Technical Services' support. While the program has been modest in its scope and accomplishments to date, it is considered as one of the highlights of the program and should be expanded.
7. A Center for Research Education and Technical Extension should be developed within the next decade. It would be essential to the success of the Industrial Research and Extension Center program that adequate facilities be built which would provide office and library space, lecture and conference rooms, and television and radio studios. Lodgings should be provided in order that the adult extension program could be developed to its fullest degree.
8. By 1980, the Industrial Research and Extension Center should have at least five field offices and a central office staffed with an adequate number of professional personnel to service the projected requests. Almost all of the offices would be located on or near a State college campus, and would be partially staffed with persons having joint appointments with the various educational institutions.
9. It is envisioned that the community college system will be well developed by 1980 and that most of the educational programs would be jointly sponsored by the Industrial Research and Extension Center and the community colleges and/or senior colleges of the State.
10. The Industrial Research and Extension Center should have ready access to a computer as soon as possible. This would make it possible for the Industrial Research and Extension Center to do operations research and systems analyses for public and private developmental agencies. A number of research projects that have been suggested in the past have not been attempted because of the lack of computer facilities.
11. The Industrial Research and Extension Center should be able to supplement its own staff by utilizing the services of college personnel. The present barrier to using other State college and university personnel is hampering the development of a good extension program.

To implement the expansion of services by the Industrial Research and Extension Center as listed above will require \$706,000 for Fiscal Year 1970-71; \$1,350,000 for Fiscal Year 1975-76; and \$2,000,000 for Fiscal Year 1980-81. It is anticipated that this budget will be equally divided between the Research and Extension sections. Moreover, the present funding is almost equally divided between State and Federal funds and will probably continue for several years. For maximum flexibility, however, it is felt that a larger percentage of State monies will be necessary by 1980.

The Industrial Research and Extension Center's future role will depend to a marked degree on whether or not the recommended merger of the University of Arkansas and Little Rock University is approved by the Legislature.

If the merger is approved, it is recommended that the general extension activities of the Industrial Research and Extension Center become a part of the regular extension program of the new institution.

In the event that the recommended merger is not approved, it is recommended that the extension services

TABLE XXXIV
LIBRARY VOLUMES ADDED AND EXPENDITURES
FOR BOOKS AND MATERIALS BY YEAR
1963-64 THROUGH 1966-67

	<u>Volumes Added</u>	<u>Expenditures Books and Materials</u>
1963-64	16,959	\$115,115
1964-65	14,685	101,534
1965-66	17,547	138,080
1966-67	23,205	163,568

This progress has, however, been sporadic and uneven. High volume years reflect in general special appropriations during the year for materials rather than in increased general budget funds, except for 1966-67. The sharp increase for this last year is due to an increased budget largely as a result of recommendations by the North Central Association in the spring of 1966.

It may be pointed out that for several years, library growth and services have been seriously handicapped by an inadequate and badly overcrowded library building. With the opening of a new building in the fall of 1968, it is hoped that these conditions will be alleviated for an estimated 10 to 15 years; and a rapid period of growth must come if the University Library is to take its rightful place in support of University programs.

Some recognition of the need to upgrade library collections, especially at the doctorate degree level, was made possible for 1967-68 by extra legislative appropriation. As a result of this action, the Library received an extra \$76,000 over its regular appropriation, specifically earmarked for the purchase of materials to support the 15 areas in which the doctoral degree is granted on the Fayetteville campus.

Despite the increased support for the past two or three years, the University Library falls further and further behind other university libraries in the region. The accompanying table shows rather conclusively the University's standing compared with nine other state universities in surrounding states in terms of library holdings; expenditures for books, periodicals, and binding; total expenditures; and expenditures per student in 1966-67. For the purpose of this comparison, only figures for the Fayetteville campus are used as it is at this location the needs are most critical. This table reveals that the total expenditure range per student for the nine other State university libraries ranged from a low of \$52.95 for Mississippi to a high of \$137.57 for the University of Texas. The average for the nine was \$88.83, while the amount for the University of Arkansas was \$42.76, **less than half this average**. It may also be pointed out that of the \$163,569 spent for materials during the year, \$27,860 was from gift accounts and from Federal grants or research grants supported by Federal funds, such as National Defense Education Act, National Aeronautical and Space Agency, and National Science Foundation. Again, using the average per student of the nine other universities, had the University Library expended this average, the total would have been \$886,900 or more than twice the actual amount.

A norm frequently cited for library expenditures is that of five per cent of the total college or university budget for educational and general purposes. This ratio is not too satisfactory or reliable as a basis for comparison, especially for the Land-Grant university since this type of institution will normally have large commitments for extension services which will not be common to others. Thus the use of a per student figure is perhaps more revealing and one which may come nearer to indicating the true excellence of the institution.

The Future:

Looking to the future, the practical use of the formula of \$60 per student, recommended by the Commission on Coordination of Higher Educational Finance for the University Library's budget, should certainly be worthy of attainment. Should this come to pass, the library would receive an appropriation of \$665,320 for the fiscal year 1968-69, based on an estimated enrollment of 10,922; \$681,600 for fiscal year 1969-70, based on an enrollment of 11,360; and \$712,920 for fiscal year 1970-71, based on an estimated enrollment of 11,882. To these budget figures should be added \$210,000 for 1968-69; \$189,000 for 1969-70; and \$170,100 for 1970-71 as deficiency make-up, based upon an initial estimated deficit of 300,000 volumes at 10 per cent per year at \$7 per volume. This would certainly be a large improvement over present conditions, though considerably below the average support of the nine other State universities referred to earlier.

Proposals have been made by the committee over the three or four-year period to attempt to overcome the arrearages of Arkansas institutional libraries. The application of the Clapp-Jordon formula to the University Library revealed a deficiency of approximately 519,000 volumes, or somewhat greater than the total present holdings. It was proposed in the "Role and Scope" study to overcome this deficiency by the addition of some 37,000 volumes per year over a 14-year period in addition to maintaining an average of an additional 33,000 volumes per year in order to reach minimal adequacy by 1981 for the anticipated enrollment of 18,335 students.

Admittedly this would be approaching the ideal and perhaps not possible of attainment by the State of Arkansas. From a practical standpoint, it may be assumed that the deficiency is 300,000 volumes and that this would likewise be overcome during the proposed 14-year period. This would mean the acquisition of an average of 21,400 additional volumes per year. Assuming that the proposed \$7 per volume average cost could produce these volumes, the additional cost per year would be \$149,800.

The \$7 per volume, at least for a university library, is not a practical figure. An estimate of \$10.50 per volume, as prices now prevail, is believed to be more accurate; and with an average annual increase in book prices of 9.4 per cent, as cited by Dean Downs in his recent study of Missouri Libraries, the cost is likely to be nearer \$15 per volume if prices continue to rise during the 14-year period. Actually, the cost per volume for filling deficiencies is likely to be considerably more than the average. For it will entail the acquisition of a large percentage of out-of-print books and expensive reprints of research journals where actual cost per volume is \$20 to \$30. Added to this deficiency make-up, even at \$7 per volume, there must be a normal acquisitions program to keep abreast of current publications. This must be some 30,000 volumes per year for a major university library. This, taking into consideration minimum arrearage make-up, plus current needs, a minimal book budget of \$500,000 per year will be required. Authorities have pointed out that even if a university library's collection is up to the required level of adequate support for curriculum and research needs and its book budget is such as to make this possible, a 10 per cent increase is necessary yearly to offset rising prices year by year.

The University of Arkansas Library's current periodical subscription list of some 4,000 titles is far short of the needs for a university library of the calibre of the University of Arkansas and should be doubled within a very few years, as journals are the very life blood of teaching and research. To reach this figure will require a subscription budget of at least \$100,000. Binding costs for perhaps 80 per cent of these will at present prices run to around \$40,000.

Library Resources of Senior Colleges: 131

Marked increases in enrollments, expanding curricula, and published materials in increasing amounts in new fields of knowledge as well as old, create expanding requirements upon the senior college libraries. Table XXXVII presents significant figures on their holdings.

A study of these figures shows that the 15 senior colleges in Arkansas reporting, public and private, hold a total of 916,375 volumes. They added 296,125 volumes during a five-year period, 1963-67, at an average rate of 59,225 per year. This means that nearly one-third of the total holdings have been added during the five-year period, and suggests a favorable currency to senior college library holdings. Holdings range from 104,876 volumes

TABLE XXXV
STATISTICS OF 10 SOUTHERN STATE UNIVERSITY LIBRARIES—1966-1967*

INSTITUTION	Vols. in Library June 30, 1967	Expended For Books Periodicals & Binding	Total Library Expenditure	Expended Per Student	Undergrad	Enrollment Fall Term 1966 Graduate	Total
Alabama U.	1,121,915	\$544,831	\$1,213,743	\$ 66.33	15,093	4,072	19,165
Arkansas U.	499,243	163,569	426,504	42.76	8,831	1,142	9,973
Florida U.	1,213,855	683,649	1,759,381	102.90	14,612	2,478	17,090
Georgia U.	772,380	894,955	1,652,571	114.28	12,735	1,725	14,460
Kentucky U.	1,222,730	625,487	1,492,451	108.00	11,942	1,891	13,833
Louisiana State	1,410,760	865,802	2,175,908	86.52	21,435	3,714	25,149
Mississippi U.	370,053	134,025	311,065	52.95	5,168	706	5,874
Oklahoma U.	1,084,690	409,860	996,503	66.39	12,126	2,868	14,994
Tennessee U.	982,860	780,377	1,717,667	64.62	22,783	3,806	26,589
Texas U.	1,945,271	2,471,835	3,761,861	137.57	23,038	4,307	27,345

*Source: Statistics of Southern College and University Libraries, 1966-1967, Comp. and Pub. by Louisiana State University Library.

reported by Arkansas State University to a minimum of 41,635 volumes reported by Arkansas Agricultural and Mechanical College. Periodical subscriptions ranged from 205 to 1,203 current titles, with the average number of 547 currently received. Arkansas State University and State College of Arkansas subscribe to over 1,000 titles, while Arkansas College and Philander Smith and College receive less than 300.

Quantitative standards are a significant, though somewhat intangible, measure of library holdings. Such an application was made to periodicals received in the libraries of the senior colleges in Arkansas and to basic reference sources held. A qualitative evaluation of general collections in these libraries will be a project for future consideration. In terms of quantitative measure, the Association of College and Research Libraries' standards have been applied to available data, and for the State supported institutions committee standards as well. Such standards tend to measure the adequacy of a library in meeting the instructional needs of a college, and it appears

**TABLE XXXVI
STATISTICAL SUMMARY
LIBRARY REPORT
1966-1967**

Acquisitions

Classified books and pamphlets

	Fayetteville Campus	Little Rock (Tech Campus) (Med Ctr)	
Total volumes added	23,205	1,152	3,380
Discarded - lost, worn out, etc.	<u>5,029</u>	<u>22</u>	<u>63</u>
	18,176	1,130	3,317

Total cataloged and classified volumes in the University Libraries - June 30, 1967

Fayetteville Campus	499,243	Agri. Library	22,981
Little Rock - Medical Center	60,592	Chemistry	9,877
Little Rock - Tech Campus	13,539	Engineering	23,993
Law School, Evening Division	<u>16,983</u>	Fine Arts	13,126
Total	590,357	Law Library	44,948
		Physics	3,481
		General Lib.,	380,837
		and Misc.	

Miscellaneous additional materials (Fayetteville)

Maps	32,700
Microfilm (spools)	6,467
Microcards	101,375
Microfiches	33,289
Microprints (sheets)	39,434
Phonograph records	
General Library	702
Fine Arts Library	4,106
Recording tape (reels)	219 (270,000 ft.)
Manuscripts (processed)	34,656
U. S. Documents, bound volumes and pieces not cataloged	281,446
U. S. Atomic Energy depository collection—	
Documents	26,847
Microcards, microfiches	129,070

Current subscriptions		Tech Campus	(Med Ctr.)
Paid subscriptions	2,702	265	1,170
Gifts and Exchange	<u>1,273</u>	<u>15</u>	<u>374</u>
Total	3,975	280	1,544

more

TABLE XXXVI (continued)
Statistical Summary Library Report 1966-1967

	Fayetteville Campus	Little Rock (Tech Campus) (Med Ctr)	
Volumes added - by source and type			
By purchase and binding	16,816	868	2,932
By deposit, gift and exchange			
U. S. Documents	1,294		
Arkansas Documents	641		
Other State Documents	652		
Gifts and Deposits - other sour.	3,205	284	448
Exchanges	597		
Total	23,205	1,152	3,380

TABLE XXXVII

**AVERAGE NUMBER OF VOLUMES, NUMBER ITEMS NON-BOOK
MATERIALS AND PERIODICAL SUBSCRIPTIONS ADDED
TO LIBRARIES IN ARKANSAS PUBLIC AND PRIVATE INSTITUTIONS
1963-1967**

Institution	July 1, 1967	Avg. No. of Vols. Added Annually 1963-1967	No. Items Non-Book Materials 1967-1968*	No. Periodicals Sub- scriptions July 1, 1967
Arkansas A & M Coll.	41,635	2,656	583	425
Arkansas A M & N	43,833	4,000	381	369
Arkansas College	40,979	1,937	3,719	264
Arkansas Polytechnic	47,574	2,705	2,119	612
Ark. State University	104,876	12,570	9,453	1,293
College of the Ozarks	58,528	2,523	1,390	382
Harding College	82,345	3,571	3,790	570
Henderson State Coll.	71,013	4,734	5,743	676
Hendrix College	71,956	4,013	1,192	394
John Brown University	36,392	2,654	153	326
Little Rock University	58,000	4,100	255	573
Ouachita Baptist Univ.	69,205	3,000	3,401	527
Philander Smith	50,233	3,465	520	205
Southern State Coll.	45,901	2,896	2,574	509
State College of Ark.	93,905	4,401	2,000	1,078

*Microfilm, Filmstrips, Motion Pictures, Tapes.

worthwhile to apply such objective standards. Both American College and Research Libraries and committee standards stress a direct relationship between size of collection and student enrollment. It should be obvious that committee standards relate to economic factors as well as the ideal, while American College and Research Libraries' standards support a more idealistic approach; both offer a valuable measure, and adherence to their implications will provide Arkansas senior colleges with increasingly better libraries. American College and Research Libraries' standards make the following specifications in terms of enrollment for library holdings: up to 600 students, 50,000; for every additional 200 students, 10,000 volume. Committee figures are as follows: up to 600 students, 25,000 volumes; for every additional 200 students, 8,000 volumes.

Six of the 15 colleges, or two-fifths, fall below the minimum standard of 50,000 volumes. No State supported college met either American College and Research Libraries or committee standards, while three of the private institutions met the standards set by American College and Research Libraries. The significant relationship here is that of enrollment to holdings; and the largest enrollment of those schools meeting American College and Research Libraries standards, Hendrix College, was 853 students. Those colleges meeting American College and Research Libraries standards are College of the Ozarks, Hendrix College, and Philander Smith College.

The following table shows figures relating to the application of these two standards to enrollments in Arkansas senior colleges.

TABLE XXXVIII
LIBRARY HOLDINGS IN ARKANSAS PUBLIC AND PRIVATE
SENIOR COLLEGES COMPARED TO AMERICAN COLLEGE AND
RESEARCH LIBRARIES AND COMMITTEE STANDARDS
1966-1967

Institution	No. Vols. 7-1-67	Enroll- ment 66-67	Comm.* Standard	Defici- ency 66-67	ACRL Standard	Defici- ency 66-67
Ark. A & M Coll.	41,635	1,799	65,000	23,000	100,000	58,500
Ark. A M & N Coll.	43,833	3,149	129,000	85,000	180,000	136,000
Ark. College	40,979	330	----	----	50,000	9,000
Ark. Polytechnic	47,574	2,296	89,000	41,500	130,000	82,500
Ark. State Univ.	104,876	5,370	209,000	104,000	280,000	175,000
Coll. of the Ozarks	58,528	486	----	----	50,000	----
Harding College	82,345	1,741	----	----	110,000	28,000
Henderson State Coll.	71,013	2,879	113,000	42,000	160,000	89,000
Hendrix College	71,956	853	----	----	60,000	----
John Brown Univ.	36,392	664	----	----	50,000	13,600
Little Rock Univ.	58,000	3,238	----	----	180,000	122,000
Ouachita Baptist	69,205	1,881	----	----	110,000	69,200
Philander Smith	50,233	671	----	----	50,000	----
Southern State	45,901	2,262	89,000	43,000	130,000	84,000
State College of Ark.	93,905	3,503	137,000	43,000	190,000	96,000

*The Committee to advise The Commission on Coordination of Higher Educational Finance on developing the "Instructions for Preparing and Submitting Requests for Legislative Appropriations."

The holdings in all senior college libraries, 916,375, failed to meet American College and Research Libraries standards by 913,625 volumes; thus the senior colleges have approximately one-half the holdings required to meet these standards. Applying committee standards to publicly supported senior colleges, the data shows holdings of 448,737 compared to a standard requirement of 831,000 volumes; again, a deficiency of almost 50 per cent.

In summation of the data related to holdings, it appears that in terms of recent additions, senior college libraries in Arkansas are making a significant improvement in quantities of materials held and in frequency of additions. The holdings data show, also, that in spite of the marked efforts being made that senior college libraries

fall far short, about 50 per cent, of being adequate in terms of holdings and enrollment.

Rate of Growth:

A related criterion is the rate of growth of the book collection. As implied above, acquisitions have been accelerating at a favorable pace in Arkansas senior college libraries. This in turn bespeaks institutional concern and support; both are necessary, as library holdings become obsolescent and lose their interest and value. While adequate financing determines to a large extent the rate of growth of a collection, other factors such as the number of student and faculty members to be served; the support needs of the curriculum; and the age of the library's collection are important considerations. Dr. Downs notes in his **Resources of Missouri Libraries** that "The rate and quality of growth are an infallible index to the level of institutional support." Such support is needed and sought by senior college libraries in Arkansas. A reasonable standard, applicable to most college situations, is the addition of five volumes per student per year. On the basis of additions to library holdings for senior colleges for the period 1963-1967, it would appear that no State supported college met this standard; but of the private colleges surveyed Arkansas College, College of the Ozarks, Hendrix College, and Philander Smith College may have. Arkansas State University may add five volumes per student during the current fiscal year, and it will likely be the only State supported college to come close to matching the five-volumes-per-capita standard.

Acquisition of 5,000 volumes per year is a reasonable goal for a senior college library in view of the wealth of materials available and the vast extent of current publishing in practically all scholarly fields. Colleges falling below this figure cannot expect to attain a broad representation of essential library materials. "This rate of growth is regularly attained by libraries of senior colleges of high rank in the academic world," says Dr. Downs. Only the emerging university at Arkansas State exceeds this figure of the 15 colleges represented in this study, and her rate is more than double this figure. Henderson State College approaches the 5,000 volume mark for the five-year period, 1963-1967, while Arkansas Agricultural, Mechanical, and Normal College, State College of Arkansas, Hendrix College, and Little Rock University have acquired materials at a rate of 4,000 volumes per year or better.

Periodicals:

The number of current periodicals on a library's subscription list is another criterion for evaluating the strength of its collection. Periodic literature is a basic information and research source in virtually all academic areas today, and the development of extensive files of scholarly and specialized journals is of generally recognized value. Without such holdings, college libraries are seriously handicapped in meeting their obligations. While quantity may be a mark in excellence of holdings, quality rather than quantity in acquiring periodicals should be emphasized; and periodical holdings should reflect student needs, curriculum requirements, research needs of advanced students and faculty, provide support for instructional personnel, and afford thought-provoking general and recreational reading.

National surveys indicate that high-ranking colleges maintain a minimum of 600-800 titles on their current subscription lists. Arkansas Polytechnic College and Henderson State College meet the lower range of this figure, while Arkansas State University and State College of Arkansas are well above it. Harding College, Little Rock University, and Ouachita Baptist University report subscription lists above the 500 title mark; but no private college meets the minimum of the standard listed above.

The results of a survey of senior colleges to a basic periodicals list of 100 titles are shown below. Of the 15 senior colleges, only one held more than 90 titles and two others 80 or more. These three are State supported institutions, in order, Arkansas State University, Arkansas Polytechnic College, and State College of Arkansas. Harding College reported having 79 of the titles listed. John Brown University was at the low end of the range with 47 of a possible 100.

Arkansas A & M College	60	Hendrix College	64
Arkansas A M & N College	51	John Brown Univ.	47
Arkansas College	56	Little Rock Univ.	67
Arkansas Polytechnic	81	Ouachita Baptist Univ.	76
Arkansas State Univ.	96	Philander Smith Coll.	53
College of the Ozarks	50	Southern State College	61
Harding College	79	State College of Ark.	80
Henderson State College	66		

It would appear that private institutions, probably because of controlled enrollment, do considerably better in terms of number of volumes held than State supported colleges in Arkansas, while the position is reversed in terms of periodical holdings.

Newspapers:

Newspapers provide another form of serial publication both in terms of current news information and retrospective source material. Most college libraries can answer nearly all information requests through use of the **New York Times**, though aspects of current Regional and State news of the **New York Times** suffer in relation to distance, and lapsed time between publication and date of receipt. Indexing and backfiles of newspaper information are often needed, and many senior college libraries need to assume responsibility for subscription to local and State newspapers in addition to them. With the advent of indexing to the **Wall Street Journal** and **Christian Science Monitor**, two other Nationally recognized newspapers are often held by college libraries in backfiles.

Table XXXIX indicates the number of newspapers subscribed to by Arkansas senior college libraries, indicates microfilm backfiles if held, and notes those libraries which are partial depositories for Federal documents.

TABLE XXXIX
NUMBER NEWSPAPER SUBSCRIPTIONS, NUMBER NEWSPAPERS
ON MICROFILM AND PERCENT FEDERAL DOCUMENTS RECEIVED
ARKANSAS PUBLIC AND PRIVATE COLLEGES
1966-1967

Institution	No. News- paper Sub- scriptions	No. News- papers Rec. on Microfilm	Partial Documents Depository	Percentage Federal Documents Received
Arkansas A & M College	10	3	Yes	40
Arkansas A M & N College	42	1	Yes	--
Arkansas College	7	-	---	--
Arkansas Polytechnic	10	2	Yes	40
Ark. State University*	20	3	Yes	50
College of the Ozarks	9	1	Yes	11
Harding College	9	1	Yes	10
Henderson State College	9	3	No	--
Hendrix College	8	2	Yes	20
John Brown University	10	1	No	--
Little Rock University	6	1	No	--
Ouachita Baptist Univ.	9	2	Yes	40
Philander Smith College	12	-	No	--
Southern State College	16	1	Yes	5
State College of Ark.	21	3	No	--

*Only Arkansas State University reported the maintenance of a collection of State publications.

Government Publications:

The Federal Government is the most prolific of all publishers; it publishes materials in all forms including books, periodicals, pamphlets, maps and other materials; and much of the information is important to teaching and research in a variety of fields. As the tabulation in the table shows, there are many partial depositories for Federal documents in Arkansas; the situation in regard to acquisition of State documents lacks much that would be desirable to senior college libraries. It is hoped that, as a result of this and other studies being carried out in Arkansas at this time, a centralized system for collection and distribution of State documents will be established. In general, it may be assumed that the larger of the senior college libraries tend to receive, process, and hold a much higher proportion of Government publications than the smaller ones; and that their holdings are more comprehensive. None of the senior colleges is a full deposit library, nor a Regional one. A further assumption is made concerning State documents, namely, that collection of such items is done on a highly selective basis. Only Arkansas State University reported a collection of State publications.

Reference Resources:

The fundamental publications in an adequate collection of college or university libraries are bibliographies, dictionaries, encyclopedias, yearbooks, biographical and statistical compilations, indexes, abstracting services, and like works which go toward making up the library's reference collection. Reference tools and sources often serve as an excellent point for initiation of research on practically any topic.

During the first quarter of 1968, the 15 senior colleges reporting in Arkansas were presented a list of 257 reference titles to be checked against their holdings. This list was taken from the September, 1965, issue of **Choice: Books for College Libraries**, and is a publication of the American Library Association. The results of the survey are shown below.

Arkansas A & M College	212	Hendrix College	219
Arkansas A M & N College	182	John Brown University	160
Arkansas College	184	Little Rock University	210
Arkansas Polytechnic	190	Ouachita Baptist Univ.	203
Arkansas State University	244	Philander Smith College	207
College of the Ozarks	226	Southern State College	148
Harding College	223	State College of Arkansas	208
Henderson State College	210		

Downs, writing in **Resources of Missouri Libraries**, suggests that because of the basic nature of such a list all senior colleges should have a minimum of 75 per cent of the total group of 257 titles (193). He further states that a library falling below 50 per cent (129 titles) is clearly deficient and poorly equipped to provide adequate reference service to its students and faculty. It is a favorable notation that 11 of the 15 libraries reported holdings in excess of the 75 per cent norm and no library fell below the 50 per cent minimum. Holdings ranged from the 148 titles reported by Southern State College to the 244 reported by Arkansas State University. Recency in reference holdings should be stressed as the expense of acquiring the most recent editions is often held in abeyance due to lack of funds.

TABLE XXXX

**ADDITIONAL VOLUMES NEEDED BY ARKANSAS PUBLIC AND PRIVATE
SENIOR COLLEGES TO OVERCOME DEFICIENCIES
1966-67-1975-76**

Institution	1966-67 volumes	Est. student enrollment 1975-76	1975-76 Arkansas standards	1975-76 ACRL standards	Additional Volumes needed to overcome deficiency 1975-76 Arkansas standards	Additional Volumes needed to overcome deficiency 1975-76 ACRL standards
Ark. A & M	41,635	2,967	121,000	170,000	79,365	128,365
Ark. A M & N	43,833	5,118	209,000	280,000	165,167	236,167
Arkansas College	40,979	600	25,000	81,000	--	40,021
Ark. Poly. Coll.	47,574	4,011	169,000	230,000	121,426	182,426
Ark. State Univ.	104,876	11,536	465,000	600,000	360,124	495,124
Coll. of Ozarks	58,528	825	41,000	99,000	--	40,472
Harding Coll.	82,345	3,300	137,000	190,000	54,655	107,655
Henderson State	71,013	5,376	217,000	290,000	145,987	218,987
Hendrix College	71,956	1,200	49,000	112,000	--	40,044
John Brown Univ.	36,392	1,250	57,000	90,000	20,608	53,608
Little Rock Univ.	58,000	6,296	257,000	340,000	199,000	282,000
Ouachita Baptist U.	69,205	2,024	89,000	130,000	19,795	60,795
Philander Smith	50,233	1,025	49,000	91,000	--	40,767
Southern State	45,901	3,289	137,000	190,000	91,099	144,099
State College	93,905	6,659	273,000	360,000	179,095	266,095

Audio-Visual Materials:

Audio-visual materials such as film, filmstrips, recordings, and tapes form an integral part of modern college instruction; and every college library must concern itself with them, either as library administered holdings or through an adjunct service. It becomes a library responsibility, if no other agency on the campus has such an assignment. Inspection of the first tables indicates that senior college libraries in Arkansas do concern themselves with such materials. There appears to be four rough divisions in amount of audio-visual holdings among the colleges, with Arkansas State University listing holdings of almost 9,500 items; Henderson State College, Harding College, Arkansas College, and Ouachita Baptist University reporting holdings between 3,000 and 6,000 items; Southern State College, Arkansas Polytechnic College, State College of Arkansas, College of the Ozarks, and Hendrix College listing between 1,000 and 3,000 items, and the other five colleges—Arkansas Agricultural and Mechanical College, Philander Smith College, Arkansas Agricultural, Mechanical and Normal College, Little Rock University, and John Brown University—reporting holdings of less than 600 items. Further comment concerning audio-visual materials await a qualitative survey of such holdings in Arkansas senior college libraries.

TABLE XXXXI

PROJECTIONS OF NUMBER OF PERIODICAL SUBSCRIPTIONS
NEEDED BY ARKANSAS PUBLIC AND PRIVATE SENIOR INSTITUTIONS
1967-1980

	Number Volumes Held		Number Periodical Subscriptions	
	1967	1980	1967	1980
Arkansas A & M	41,635	100,000	425	800
Arkansas A M & N	43,833	224,000	366	1,200
Arkansas College	41,372	58,000	--	--
Arkansas Polytechnic	50,000	130,000	650	800
Ark. State University	181,715	641,000	1,293	4,900
College of the Ozarks	--	--	--	--
Harding College	85,300	135,000	564	--
Henderson State	67,127	210,800	--	--
Hendrix College	61,106	--	424	--
John Brown Univ.	--	--	--	--
Little Rock Univ.	62,000	500,000	600	7,500
Ouachita Baptist	81,000	300,000	550	--
Philander Smith	--	--	--	--
Southern State	40,914	240,800	393	1,000
State College	93,905	397,000	867	2,433

A Final Comment On Library Resources:

Arkansas Agricultural and Mechanical College, Arkansas State University, and State College of Arkansas reported sizeable map collections. Henderson State College reported extensive holdings in musical scores and art slides. Arkansas Polytechnic College reported a special collection in geology. Arkansas Agricultural and Mechanical College reported a collection of 6,000 forestry pamphlets.

Financial Support:

The table below includes both public and private senior colleges in Arkansas in 1966-67, showing: (1) total library expenditures; (2) book, periodical, and binding expenditures; (3) total institutional expenditures; and (4) library percentage of total institutional expenditures.

TABLE XXXXII
LIBRARY EXPENDITURES IN ARKANSAS
PUBLIC AND PRIVATE SENIOR COLLEGES
1966-67

	Total Library Expenditures 1966-67	Books Periodicals Binding 1966-67	Total Inst. Expend- itures 1966-67	Per- centage 1966-67
Ark. A & M	64,668	23,555	1,467,776	4.40
Ark. A M & N	93,113	38,974	3,644,990	6.40
Arkansas College	39,185	18,115	506,297	7.73
Ark. Polytechnic	97,816	43,648 *	1,763,202	5.54
Ark. State Univ.	254,792	133,000	3,922,307	6.49
Coll. of the Ozarks	30,535	15,368	516,832	5.90
Harding College	61,008	30,014	1,814,432	3.36
Henderson State	100,677	52,129	2,344,058	4.29
Hendrix College	107,960	61,530	1,119,278	9.64
John Brown Univ.	39,630	17,310	879,500	4.50
Little Rock Univ.	85,618	42,500	1,452,493	5.89
Ouachita Baptist	72,712	33,406	1,482,233	4.90
Philander Smith	31,254	13,723	693,811	4.50
Southern State	85,924	33,249	1,774,181	4.84
State Coll. of Ark.	<u>161,904</u>	<u>52,658</u>	<u>2,407,348</u>	<u>6.70</u>
TOTALS State	858,894	377,213		
Private	467,902	231,966		

*Includes Federal grant of \$4,028.

Authorities are in general agreement that the library budget should be determined in relation to the institution's total educational budget. It should be emphasized that the quality of a library's resources and services depends in large degree upon adequate financial support.

Normally, the expense of maintaining good library service will require a minimum of five per cent of the total expenditures for educational and general purposes. Seven of the 15 senior college libraries reporting spent less than five per cent, and two senior colleges more than seven per cent. Arkansas College and Hendrix College have exceeded the minimum standard of five per cent by 2.73 per cent and 4.64 per cent, respectively. These high percentages indicate a concentrated effort by these two institutions toward a high standard of excellence. Seven senior colleges have not yet reached a minimum figure.

Tables XXXV and XXXVIII include information pertinent to Arkansas' standards and Association of College and Research Libraries' (a division of the American Library Association) standards for 1975-76 and 1980-81, showing: (1) volumes in Arkansas senior colleges as of July 1, 1967; (2) the estimated enrollments for 1975-76 and 1980-81; (3) the Arkansas standards for 1975-76 and 1980-81; (4) the Association of College and Research Libraries' standards for total volumes in 1975-76 and 1980-81; (5) additional volumes needed to overcome the present deficiency in 1975-76 and 1980-81 by Arkansas' standards; and (6) the additional volumes needed to overcome the present deficiency in 1975-76 and 1980-81 by Association of College and Research Libraries' standards.

Arkansas' standards are 25,000 volumes for the first 600 students and 8,000 volumes for each additional 200 (or fraction) students. Association of College and Research Libraries' standards are 50,000 volumes for the first 600 students and 10,000 volumes for each additional 200 (or fraction) students. In addition, a reasonable standard for growth based on the statistics of leading senior college libraries around the Nation would be 5,000 volumes per year. This standard has been added to those senior colleges which would not have attained the minimum 5,000 volume figure in terms of student enrollment.

TABLE XXXXIII

**ADDITIONAL VOLUMES NEEDED BY ARKANSAS
PUBLIC AND PRIVATE INSTITUTIONS TO OVERCOME DEFICIENCIES—1980-81**

Institution	1966-67 volumes	Est. Student enrollment 1980-81	1980-81 Arkansas standards	1980-81 ACRL standards	Additional volumes needed to overcome deficiency—1980-81 Arkansas standards	Additional volumes needed to overcome deficiency—1980-81 ACRL standards
Ark. A&M	41,635	3,781	153,000	210,000	111,365	168,365
Ark. A M & N	43,833	6,379	257,000	340,000	213,167	296,167
Ark. Bapt. Coll.	n/r*	800	33,000	60,000	n/r*	n/r*
Arkansas College	40,979	600	25,000	111,000	-0-	70,021
Ark. Poly. Coll.	47,574	5,106	209,000	280,000	161,426	232,426
Ark. State Univ.	104,876	16,046	649,000	830,000	544,124	725,124
Ozarks	58,528	1,000	41,000	129,000	-0-	70,472
Harding	82,345	4,628	193,000	260,000	110,655	177,665
Henderson	71,013	7,254	297,000	390,000	225,987	318,987
Hendrix	71,956	1,200	49,000	142,000	-0-	70,044
John Brown Univ.	36,392	1,250	57,000	107,000	20,608	70,608
Little Rock Univ.	58,000	8,200	329,000	430,000	271,000	372,000
Ouachita	69,205	2,341	97,000	140,000	27,795	70,795
Philander Smith	50,233	1,400	57,000	121,000	6,767	70,767
Southern State	45,901	4,067	169,000	230,000	123,099	184,099
State College	93,905	9,001	369,000	480,000	275,095	386,095

*n/r—not reported

State supported senior colleges will need to add 1,654,263 volumes in order to meet Arkansas' standards by 1980-81. This would indicate that these colleges should add 118,161 volumes per year for the next 14 years. The private colleges will need to add 972,372 volumes to meet Association of College and Research Libraries' standards by 1980-81, or 69,455 volumes per year.

The librarian at the University of Arkansas has estimated increasing costs per volume as shown below.

67-68	\$8.40	74-75	\$9.75
68-69	8.40	75-76	10.25
69-70	8.85	76-77	10.25
70-71	8.85	77-78	10.75
71-72	9.30	78-79	10.75
72-73	9.30	79-80	11.30
73-74	9.75	80-81	11.30

The average cost per volume in 1967-68 is \$8.40. Inflation in costs is modestly estimated at about five per cent for each two-year period.

If the librarian's formula is applied to the deficiencies found in column (5), Table XXXXIII, the cost to the State of Arkansas and the private colleges for library materials is shown to be:

TABLE XXXXIV
ESTIMATED COST OF OVERCOMING LIBRARY DEFICIENCIES
IN ARKANSAS PUBLIC AND PRIVATE SENIOR COLLEGES
1967-68-1980-81

	<u>Public Senior Colleges</u>	<u>Private Senior Colleges</u>
1967-68	\$ 992,552	\$ 583,422
1968-69	992,552	583,422
1969-70	1,045,725	614,677
1970-71	1,045,725	614,677
1971-72	1,048,897	645,932
1972-73	1,048,897	645,932
1973-74	1,152,070	677,186
1974-75	1,152,070	677,186
1975-76	1,211,150	711,914
1976-77	1,211,150	711,914
1977-78	1,270,231	746,641
1978-79	1,270,231	746,641
1979-80	1,335,219	784,842
1980-81	1,335,219	784,842
TOTAL	\$16,111,688	\$9,529,228

According to ratios normally recommended, one-third of the total library budget should be spent for books (library materials). At this rate, \$48,635,064 will be required for the seven State supported senior colleges for total library budgets for the period 1967-68 to 1980-81 to bring these colleges to Arkansas' standards in all aspects of library responsibility and service; and \$28,587,684 will be required to bring the private colleges to these standards. As previously reported, this figure does not reflect the losses, withdrawals, and discards from the book collection and, therefore, represents a minimum figure. Since the 1967-68 budgets are already in force,

there should be approximately \$615,339 added to the book budgets to reach standards by 1980-81 for State supported institutions and \$351,456 for private institutions.

Library Personnel:

Although the size and quality of a library's holdings are themselves the chief measure of its worth, staff competence greatly affects the value of these resources. Funds available for salaries serve as an important determinant of competence. In 1967-68 the salaries paid librarians in the State are listed below.

TABLE XXXXV
SALARIES PAID LIBRARIANS IN ARKANSAS
PUBLIC AND PRIVATE SENIOR COLLEGES
1967-68

	Salary 1967-68 <u>Lib. Dir.</u>	Salary 1967-68 <u>Other Prof. Ass't.</u>
Arkansas A & M College	\$ 8,200	\$5,050-\$6,100
Arkansas A M & N College	7,764	7,044-7,392
Arkansas College	9,972	9,000
Arkansas Polytechnic	10,500	9,000
Arkansas State University	13,000	7,350-7,665
College of the Ozarks	6,750	
Harding College	7,750	6,000-6,650
Henderson State College	8,988	6,960
Hendrix College	10,000	7,200-8,500
John Brown University	8,500	6,250
Little Rock University	10,000	7,000-7,500
Ouachita Baptist University	7,200	4,500
Philander Smith College	8,500	6,500
Southern State College	8,520	7,200-7,920
State College of Arkansas	12,700	7,500-10,212

The recommendations of the Association of College and Research Libraries and a review of practices in college libraries point to a number of standards for the size of library staffs.

1. Three professional librarians constitute the minimum number required for effective service.

The salaries in Table XXXXVI may be compared with those of a selected group of 11 institutions that are nearly similar in size and function.

TABLE XXXXVI

COMPARISON OF SALARIES PAID LIBRARIANS IN ARKANSAS
PUBLIC SENIOR COLLEGES WITH OTHER SELECTED STATES
1967-1968

Adams State (Colo.) (Grad)	Public	2674	11,712	\$9,000-11,400
Appalachian State (NC) (Grad)	Public	4991	15,600	8,925
Austin Peay State College (Grad)	Public	2894	13,500	8,350
Berea	Private		11,000	7,800
Florence State College (Grad)	Private	2682	10,600	9,300
Hardin Simmons (Grad)	Private	1801	10,000	5,425
Hope College (Mich.)	Private	1790	11,900	8,520
Mississippi College (Grad)	Private	2048	12,000	8,400
Peru State (Neb.)	Public	1097	11,900	8,500
SW Missouri State	Public	5761	15,000	9,136
Valdosta State (Ga.)	Public	1981	12,650	9,820

It may be noted that Arkansas insitutions suffer by comparison, an indication of some disadvantage in the competition for librarians.

2. It may be expected that a ratio of professional librarians to students of 1 to 400 be maintained.
3. The library should have two clerical workers for each professional librarian.
4. The library should provide 20 student working hours each week for each full-time staff member, professional and clerical (or 720 student working hours in a 36-week academic year).

The accompanying table provides data for 1966-67 showing the staff members for professional and clerical staffs and student working hours together with deficiencies identified by the above standards.

TABLE XXXXVII

**NUMBER PROFESSIONAL LIBRARY STAFF MEMBERS AND
DEFICIENCIES IN ARKANSAS PUBLIC AND PRIVATE SENIOR COLLEGES
1966-67**

	Prof. Staff 1966-67		Non-Prof. Staff 1966-67		Hrs. Student Assistance 1966-67	
	No.	Def.	No.	Def.	No.	Def.
Arkansas A & M	3	1	2	6	7,800	840
Arkansas A M & N	4	4	10	6	24,000	(- 7000)
Arkansas College	2	1	0	6	3,282	3200
Arkansas State Univ.	10	2	12	12	36,638	(-10,700)
Arkansas Polytechnic	3	2	5	5	12,547	(- 1350)
College of the Ozarks	1	2	0	6	4,303	
Harding College	3	1	3	5	9,458	(- 800)
Henderson State Coll.	5	2	2	12	9,257	5800
Hendrix College	3	0	4	2	6,500	(- 400)
John Brown Univ.	2	1	1	5	1,500	4500
Little Rock Univ.	4	4	3	13	6,181	11,900
Ouachita Baptist	2	3	3	7	16,363	(- 5500)
Philander Smith Coll.	2	1	2	4	25,820	(-19,300)
Southern State Coll.	4	1	1	9	10,793	
State College of Ark.	6	3	3	15	19,891	

Five institutions have fewer than the minimum three professional librarians. Although there is a general deficiency in the number of professional librarians, the shortage of clerical assistance is striking, suggesting the use of librarians in nonprofessional capacities and a heavy reliance upon student labor. The latter impression is reinforced by the number of colleges (seven) that exceed this standard.

TABLE XXXXVIII

**PROJECTED PROFESSIONAL STAFF NEEDS IN LIBRARIES,
ARKANSAS PUBLIC AND PRIVATE SENIOR COLLEGES
1975-76-1980-81**

	Staff Needs 1975-76			Staff Needs 1980-81		
	Prof. Staff	Non-Prof. Staff	Hrs. of Student Asst's.	Prof. Staff	Non-Prof. Staff	Hrs. of Student Asst's.
Ark. A & M	7	14	15,120	9	18	19,440
Ark. A M & N	13	26	28,080	16	32	34,560
Ark. College	3	6	6,480	3	6	6,480
Ark. Polytechnic	10	20	21,600	13	26	28,080
Ark. State Univ.	30	60	64,800	40	80	86,400
Coll. of Ozarks	3	6	6,480	3	6	6,480

more

TABLE XXXXVIII (continued)

Projected Professional Staff Needs in Libraries, Arkansas Public and Private Senior Colleges 1975-76-1980-81

	Staff Needs 1975-76			Staff Needs 1980-81		
	Prof. Staff	Non-Prof. Staff	Hrs. of Student Asst's.	Prof. Staff	Non-Prof. Staff	Hrs. of Student Asst's.
Harding College	8	16	17,280	12	24	25,920
Henderson State	13	26	28,080	18	36	38,880
Hendrix College	3	6	6,480	3	6	6,480
John Brown Univ.	3	6	6,480	3	6	6,480
Little Rock Univ.	16	32	34,560	20	40	43,200
Ouachita Baptist	5	10	10,800	6	12	12,960
Philander Smith	3	6	6,480	3	6	6,480
Southern State	8	10	12,960	10	20	21,600
State Coll. of Ark.	16	32	34,560	22	44	63,360

Table XXXXVIII summarizes the staffing needs of the senior college libraries in 1975 and 1980. These estimates are based upon the same standards stated earlier and enrollment projections provided by the Commission. It is evident that the enrollment increases in the State institutions will pose serious problems in staff recruitment. The greatest needs will be for semiprofessional personnel, while the greatest difficulty may well lie in attracting qualified professional librarians in the face of increasing shortages of librarians and the rapidly rising salary levels.

Library Facilities:

The pace of library construction and renovation in the past few years can only be described as phenomenal.

Seven new buildings and two additions have been erected within the past year (1967). Three other new libraries were completed within the last four years. The improvement in library facilities is even more striking when the new structures are compared with those that were replaced. It has been said that the institutions leaped over several generations of college libraries.

Arkansas A & M	1967
Arkansas A M & N	1967
Arkansas College	1968
Arkansas Polytechnic	1966 (renovation and addition)
Arkansas State University	1963
College of the Ozarks	1963
Harding	1967
Henderson	1967
Hendrix	1967
John Brown University	1956
Little Rock University	1967
Ouachita Baptist	1950 (1968 addition)
Philander Smith	1961
Southern State	1952
State College of Arkansas	1963

The seating of a library should provide for one-fourth of the enrollment as a generally accepted standard. The present status of the senior college libraries is as shown in Table XXXXIX.

The State supported institutions have a uniformly low ratio of library seating to enrollment even with the new facilities that have been constructed. Projected increases in enrollments will worsen the situation considerably since further new construction is less likely to occur than if old structures were still in use.

Hendrix and the College of the Ozarks exceed the standard of 40 per cent that is recommended by some consultants. Three other private institutions approximate the 25 per cent standard:

Arkansas College	23 per cent
Harding College	21
Philander Smith	32

In terms of book capacity, the situation varies from libraries which are excessively crowded to others that have room to grow for a period of years. This situation is shown in Table L.

Allowing 10 volumes per square foot (permitting growth of 15) nine colleges have room for the expansion of their holdings:

Arkansas A M & N	Hendrix College
Arkansas Polytechnic Coll.	John Brown University
College of the Ozarks	Little Rock University
Harding College	State College of Arkansas
Henderson State College	

Six colleges are certain to be crowded because they now have more than 10 volumes per square foot of shelving:

Arkansas A & M	Ouachita Baptist University
Arkansas College	Philander Smith College
Arkansas State College	Southern State College

TABLE XXXIX
PRESENT SEATING CAPACITY OF LIBRARIES IN ARKANSAS
PUBLIC AND PRIVATE SENIOR COLLEGES
1966-67

	Enrollment	No. of Seats	Percentage
Arkansas A & M	1846	300	16
Arkansas A M & N	3149	550	17
Arkansas College	330	76	23
Arkansas Polytechnic	2296	295	13
Arkansas State Univ.	5370	500	9
College of the Ozarks	486	200	41
Harding College	9134	400	21
Henderson College	3093	587	19
Hendrix College	856	400	47
John Brown University	710	105	15
Little Rock University	2626	300	11
Ouachita Baptist Univ.	1683	207	12
Philander Smith Coll.	618	195	32
State College of Ark.	3595	651	18
Southern State College	2262	250	11

TABLE L
NUMBER OF LIBRARY VOLUMES, SQUARE FEET OF SHELVING,
AND VOLUMES PER SQUARE FOOT
ARKANSAS PUBLIC AND PRIVATE SENIOR COLLEGES
1966-67

	<u>No. of Volumes</u>	<u>Sq. Ft. of Shelving Space</u>	<u>Volumes Per Sq. Ft.</u>
Arkansas A & M	41,635	3,178	13
Arkansas A M & N	43,833	7,200	6
Arkansas College	40,979	2,424	17
Arkansas Polytechnic	47,574	12,352	4
Arkansas State Univ.	104,876	7,025	15
College of the Ozarks	58,528	5,230	11
Harding	82,345	8,147	10
Henderson	71,013	22,332	3
Hendrix	71,956	12,500	6
John Brown University	36,392	4,500	8
Little Rock University	58,000	6,142	9
Ouachita Baptist	69,205	2,165	31
Philander Smith	50,233	4,216	12
Southern State	45,901	3,619	13
State College of Ark.	93,905	34,102	3

If the colleges meet the minimum standards on holdings, even those not now crowded will soon experience serious limitations of space.

Although 125 square feet of floor space for each person engaged in library technical services is a generally accepted standard, this requisite has been lowered to 100 square feet for the purposes of study. The present situation compared with the optimum is as shown in Table LI.

The optimum situation is determined by identifying the number of full-time staff members and student assistants each college library would have if personnel standards described earlier in this report were currently being met.

Student workers are equated with full-time staff members on the following basis:

1. Twenty hours of student assistance per week for each full-time staff member.
2. The total hours of student assistance per week divided by 40. (The work week of a full-time staff member.)

TABLE LI
SQUARE FEET OF WORK SPACE AVAILABLE COMPARED TO
OPTIMUM NEEDS FOR LIBRARIES IN ARKANSAS
PUBLIC AND PRIVATE SENIOR COLLEGES
1966-67

	1966-67 Work Space	1966-67 Optimum Work Space
Arkansas A & M	3,777 sq. ft.	1,800 sq. ft.
Arkansas A M & N	4,400	3,600
Arkansas College	940	1,300
Arkansas Polytechnic	2,216	2,200
Arkansas State Univ.	5,140	5,400
College of the Ozarks	700	1,300
Harding College	1,081	1,800
Henderson College	1,369	3,100
Hendrix College	3,000	1,300
John Brown Univ.	900	1,300
Little Rock Univ.	1,716	3,600
Ouachita Baptist Univ.	640	2,200
Philander Smith Coll.	818	1,300
Southern State Coll.	1,076	2,200
State College of Ark.	1,443	4,000

Future needs for seating, shelving, and work space further reflect enrollment pressures in the State supported colleges. The seating requirements in 1975 and 1980 will be double, triple, and quadruple what is presently available in these institutions. By contrast, some of the private colleges now have sufficient seating capacity to care for their needs in 1980.

When the number of volumes that each college should have in 1975 and 1980 is translated into needed square feet of shelving space, it is readily seen that the public institutions will face drastic expansions of their structures.

Finally, the work space requirements of 1975 and 1980 represent still further significant demands on the capacities of libraries.

TABLE LII
PRESENT AND PROJECTED SHELVING NEEDS FOR LIBRARIES
IN ARKANSAS PUBLIC AND PRIVATE SENIOR COLLEGES
1975

	<u>Projected No. of Vols.</u>	<u>Needed Sq. Ft. Shelving</u>	<u>Present Shelving</u>	<u>Needed Increase</u>
Arkansas A & M	121,000	12,100	3,178	8,922
Arkansas A M & N	209,000	20,900	7,200	13,700
Arkansas College	25,000	2,500	2,424	-----
Arkansas Polytechnic	169,000	16,900	12,352	4,548
Arkansas State Univ.	465,000	46,500	7,025	39,475
College of Ozarks	41,000	4,100	5,230	-----
Harding	137,000	13,700	8,147	5,533
Henderson	217,000	21,700	22,332	-----
Hendrix	49,000	4,900	12,500	-----
John Brown Univ.	57,000	5,700	4,500	1,200
Little Rock Univ.	257,000	25,700	6,142	19,558
Ouachita	89,000	8,900	2,165	6,735
Philander Smith	49,000	4,900	4,216	700
Southern State	137,000	13,700	3,619	10,081
State College of Ark.	273,000	27,300	34,102	-----

TABLE LIII
PRESENT AND PROJECTED SHELVING NEEDS FOR LIBRARIES
IN ARKANSAS PUBLIC AND PRIVATE SENIOR COLLEGES
1980

	<u>Projected No. of Vols.</u>	<u>Needed Sq. Ft. Shelving</u>	<u>Present Shelving</u>	<u>Needed Increase</u>
Arkansas A & M	153,000	15,300	3,178	12,122
Arkansas A M & N	257,000	25,700	7,200	18,500
Arkansas College	25,000	2,500	2,424	-----
Arkansas Polytechnic	209,000	20,900	12,352	8,548
Arkansas State Univ.	649,000	64,900	7,025	57,875
College of Ozarks	41,000	4,100	5,230	-----
Harding	193,000	19,300	8,147	11,153
Henderson	297,000	29,700	22,332	7,368
Hendrix	49,000	4,900	12,500	-----
John Brown Univ.	57,000	5,700	4,500	1,200
Little Rock Univ.	329,000	32,900	6,142	26,758
Ouachita	97,000	9,700	2,165	7,535
Philander Smith	57,000	5,700	4,216	1,500
Southern State	169,000	16,900	3,619	13,281
State College of Ark.	369,000	36,900	34,102	2,798

TABLE LIV

**PRESENT SEATING CAPACITY AND PROJECTED NEEDS FOR
LIBRARIES IN PUBLIC SENIOR COLLEGES IN ARKANSAS
1975-1980**

	Projected Enrollment		Seating		Needed Increase	
	1975	1980	1975	1980	1975	1980
Arkansas A & M	2,967	3,781	742	945	442	645
Arkansas A M & N	5,118	6,379	1,280	1,400	730	850
Arkansas College	600	600	150	150	74	74
Arkansas Polytechnic	4,011	5,106	1,300	1,300	708	1,005
Arkansas State Univ.	11,536	16,046	2,884	4,000	2,384	3,500
College of the Ozarks	825	1,000	206	250	---	50
Harding	3,300	4,628	825	1,150	425	750
Henderson	5,376	7,254	1,344	1,800	757	1,410
Hendrix	1,200	1,200	300	300	(100)	(100)
John Brown Univ.	1,250	1,250	300	300	195	195
Little Rock Univ.	6,296	8,200	1,574	2,050	1,274	1,750
Ouachita	2,024	2,341	506	600	300	400
Philander Smith	1,025	1,050	206	262	10	67
Southern State	3,289	4,067	822	1,016	572	766
State College of Ark.	6,659	9,001	1,415	2,250	765	1,600

TABLE LV

**WORK SPACE REQUIREMENTS FOR LIBRARIES IN PUBLIC
SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS
1975-1980**

	1975 Optimum Work Space	1980 Optimum Work Space
Arkansas A & M	3,100	4,100
Arkansas A M & N	5,900	7,200
Arkansas College	1,300	1,300
Arkansas Polytechnic	4,500	5,900
Arkansas State University	13,500	18,000
College of the Ozarks	1,300	1,300
Harding	3,600	5,400
Henderson	5,900	8,100
Hendrix	1,300	1,300
John Brown University	1,300	1,300
Little Rock University	7,200	9,000
Ouachita	2,200	2,700
Philander Smith	1,300	1,300
Southern State	2,700	4,500
State College of Arkansas	7,200	9,900

Summary:

There appears to be a clear distinction in the growth expectation of the public and private senior colleges. The latter do not anticipate sizeable increases in enrollments. Thus their libraries will be able to concentrate upon whatever deficiencies may exist and upon a normal rate of expansion.

The public institutions are confronted with growth rates that will aggravate already-severe deficiencies. Greatly increased financial support will be needed for accelerated acquisition programs, first to meet the increased urgency of the need for strong basic collections, then to provide for expansion to keep up the pace with enrollments.

The colleges should exercise considerable caution in the expansion of their academic programs and the development of specialized courses until their basic collections meet minimum standards and resources are available to support the addition of needed materials for such programs.

Junior College Libraries: 132

Junior colleges in Arkansas reported the following holdings which are indicative of their present ability to meet current and future needs.

TABLE LVI
PRESENT LIBRARY HOLDINGS
LIBRARIES IN JUNIOR COLLEGES IN ARKANSAS
1966-67

	Enrollment 1966-67	No. of Vols. July 1, 1967	Avg. No. of Vols. Added Annually 1963-67
Ark. State Univ.—Beebe Branch	442	10,100	500
*Central Baptist College	246	5,105	300
Phillips County Community Col.	230	2,795	---
*Southern Baptist College	691	21,419	1,500
Westark Junior College	1,037	12,754	828**

*Private junior colleges
**Average 1964-67 only

The figures displayed show that the five Arkansas junior colleges reporting held a total of 52,173 volumes, ranging individually from a very limited collection of 2,795 volumes at the new Phillips County Community College to a respectable 21,419 volumes at Southern Baptist College. It should be noted that Westark Junior College opened its library in 1961, and Phillips County Community College began operation at a more recent date, 1964. Average annual additions to the junior college libraries amounted to 707 volumes for the four colleges reporting—no figures were available for Phillips County Community College—but the 1,500 volumes added annually by Southern Baptist College tend to skew the curve. The total number of volumes added during the period 1964-67 approximated 7,728. It appears that about 20 per cent of the materials in the book collections in Arkansas junior colleges, at this time, have been acquired during the past four years. Periodical subscriptions range from 46 to 303 with an average of 141 titles being currently received. Here again Southern Baptist College tends to skew the curve with its 303 periodical titles currently received.

The standards recommended by the Association of College and Research Libraries were discussed in relation to senior college libraries. Junior college library standards state that at least 20,000 well-chosen volumes,

exclusive of duplicates and textbooks, should be available in institutions with less than 1,000 student enrollment and proportionately more for larger colleges. Dr. Downs, reporting in **Resources of Missouri Libraries**, says that, in addition, a reasonable standard for growth would be 1,000 volumes a year, based on statistics of leading junior college libraries around the Nation. A strong reference collection, a carefully selected list of periodicals and newspapers, and the acquisition of maps, pamphlets, and other miscellaneous materials needed for instructional purposes are prerequisite to meeting the Association of College and Research Libraries' criteria.

Applying the Association of College and Research Libraries' standards stated above, as a qualitative measure of the holdings of the five junior colleges reporting, it is readily apparent that only Southern Baptist College meets the 20,000 volume minimum. Westark Junior College, with an enrollment of over 1,000 students has a relatively small collection of 12,754 volumes. Small enrollments in the other three junior colleges reporting are reflected in the size of their library holdings; and, seemingly, the larger the student body the greater the size of their collections. The recommended rate of growth of 1,000 volumes annually was exceeded by Southern Baptist College (1,500 vols. per year) and almost met by Westark Junior College (828 vols. per year). It appears that the Central Baptist College and Arkansas State University-Beebe Branch, with annual additions of 300 and 500 volumes per year respectively, need a sharp increase in acquisitions to meet the standards expressed here.

Only Southern Baptist College among the Arkansas junior colleges reporting is a deposit for Federal documents, and it receives less than one per cent of the available materials.

Current periodical subscriptions, in terms of number of titles, cover a broad range—40 to 303.

TABLE LVII
CURRENT PERIODICAL SUBSCRIPTIONS OF LIBRARIES
IN JUNIOR COLLEGES
1966-67

	No. News- paper Subs- criptions July 1, 1967	No. Period- ical Subs- criptions July 1, 1967	No. Items Non-book Materials 1967-1968**
Ark. State Univ.—Beebe Branch	6	87	34
*Central Baptist College	3	46	--
Phillips County Community Coll.	6	79	110
*Southern Baptist College	7	303	78
Westark Junior College	8	192	1,078

*Private junior colleges.

**Filmstrips, motion pictures, recordings, tapes.

In terms of qualitative measure, all junior colleges reporting seem weak in this area. A reasonable standard for junior college libraries is a current list of 200 titles, according to Dr. Downs, including most of those indexed by the Readers' Guide to Periodical Literature. Only Southern Baptist College and Westark Junior College come close to meeting or surpassing this 200-title figure.

All five junior colleges reporting checked their current subscriptions and holdings against the 100 titles on the "Basic Periodicals" list. The number of titles currently received in each case is:

	No. Held
Arkansas State University-Beebe Branch	14
*Central Baptist College	13

	<u>No. Held</u>
Phillips County Community College	18
*Southern Baptist College	24
Westark Junior College	31
*Private junior colleges.	

It would be reasonable to expect, in spite of the fact that this list was structured for senior colleges, that a good junior college library would hold 50 per cent of the 100 titles. None of the libraries came close to that figure.

Newspapers:

The junior colleges reporting indicated adequate holdings in current newspaper subscriptions. No college indicated microfilm holdings of any newspaper.

Audio-visual Materials:

Four of the five junior colleges reported holdings in audio-visual materials. Westark Junior College listed 1,079 items which indicates strong support to the instructional program in this area. Arkansas State University-Beebe Branch and Southern Baptist College reported small map holdings, and Westark Junior College reported over 500 transparencies held in its audio-visual collection. Central Baptist College indicated that audio-visual materials were housed in the departments in which they were used.

Reference Books

The Choice "Basic Reference Collection" list of 257 titles was checked against holdings by each of the junior colleges reporting, and the result is shown below.

	<u>No. Held</u>
Arkansas State Univ.-Beebe Branch	85
*Central Baptist College	43
Phillips County Community	125
*Southern Baptist College	135
Westark Junior College	129

*Private junior colleges.

Three of the five colleges reported holding 50 per cent of the titles listed. The other two, Arkansas State University-Beebe Branch and Central Baptist College, appear weak in the area of supporting reference sources. Dr. Downs, in **Resources of Missouri Libraries**, indicates that "A junior college library whose holdings are less than 100 of the 257 titles on the list is poorly equipped to provide its students and faculty with good reference service"—and that situation is found in two of the five junior colleges.

Finally, it should be noted, in relation to library resources, that a qualitative survey of the junior college library general collections in Arkansas remains to be made.

Financial Support:

The table below includes both public and private junior colleges in Arkansas in 1966-67, showing (1) total library expenditures 1966-67; (2) books, periodicals, and binding 1966-67; (3) total institutional expenditures 1966-67; and (4) library percentage of total institutional expenditure.

TABLE LVIII

**PRESENT LIBRARY EXPENDITURES IN ARKANSAS
PUBLIC AND PRIVATE JUNIOR COLLEGES
1966-67**

	Total Library Expendi- ture 1966-67	Books Periodicals and Binding 1966-67	Total Inst. Ex- pendi- tures 1966-67	Per- centage of total 1966-67
Ark. State Univ.—Beebe Branch	8,861	3,210	199,943	4.43
Central Baptist	7,539	1,919	240,234	3.13
Phillips County Comm. Coll.	24,646	17,877	240,000	10.26
Southern Baptist	26,616	11,510	442,981	6.00
Westark	30,682	13,500	603,286	5.08

The generally accepted expense of maintaining good library services will require a minimum of five per cent of the total expenditures for educational and general purposes. Westark Junior College and Southern Baptist College have both exceeded the amount recommended, and Phillips County Junior College has more than doubled the recommended amount. This indicates a concentrated effort toward a high standard of excellence by these institutions.

TABLE LIX

**ADDITIONAL VOLUMES NEEDED BY JUNIOR COLLEGE
LIBRARIES TO OVLRCOME DEFICIENCIES
1975-76**

	1966-67 volumes	Est. Student enroll- ment 1975-76	1975-76 ACRL Standards	Additional vols. needed to over- come def. 1975-76 ACRL Standards
Ark. State Univ.—Beebe Branch	10,100	1,065	34,000	23,900
Central Baptist Coll.	5,105	500	29,000	23,895
Phillips County Comm. Coll.	2,795	n/r*	29,000	26,205
Southern Baptist Coll.	21,419	850	29,000	7,581
Westark Junior College	12,754	n/r*	29,000	16,246

*n/r—not reported.

Association of College and Research Libraries' standards for junior college libraries state that at least 20,000 well-chosen volumes, exclusive of duplicates and textbooks, should be available in institutions with less than 1,000 students. In addition, a reasonable standard for growth based on the statistics of leading junior college libraries around the Nation would be 1,000 volumes per year. This standard has been added into the 1975-76 table and the 1980-81 table.

The additional number of volumes needed to overcome the deficiency of the junior college libraries according to the Association of College and Research Libraries' standards by 1980-81 is 122,827. This figure

represents minimum acquisitions because losses, withdrawals, and discards from the book collection are not considered.

TABLE LX
ADDITIONAL VOLUMES NEEDED BY JUNIOR COLLEGE
LIBRARIES TO OVERCOME DEFICIENCIES
1980-81

	1966-67 volumes	Est. Student enroll- ment 1980-81	1980-81 ACRL Standards	Additional vols. needed to over- come def. 1980-81 ACRL standards
Ark. State Univ.—Beebe Branch	10,100	1,470	39,000	28,900
Central Baptist	5,105	700	24,000	28,895
Phillips County Comm. Coll.	2,795	n/r*	34,000	31,205
Southern Baptist College	21,419	850	34,000	12,581
Westark Junior College	<u>12,754</u>	<u>n/r*</u>	<u>34,000</u>	<u>21,246</u>
TOTAL				<u>122,827</u>

*n/r—not reported

Library Personnel:

The standards recommended by the Association of College and Research Libraries specify a minimum of two professional librarians and two clerks, plus adequate part-time student assistance for a junior college of 20,000 volumes serving up to 500 students.

Only Southern Baptist College met the minimum standard of two professional librarians, although Westark Community Junior College reported two persons with 18 and 24 graduate hours in Library Science.

Data supplied for Arkansas' junior college libraries in 1966-67 is shown below.

TABLE LXI
PRESENT STATUS OF PROFESSIONAL AND CLERICAL
STAFF IN JUNIOR COLLEGE LIBRARIES
1966-67

	Professional Staff	Clerical Staff	Hrs. of Stud. Ass'ts.
Ark. State Univ.—Beebe Branch	1	2	NR
Central Baptist College	1	0	1656
Phillips County Comm. Coll.	1	0	370
Southern Baptist Coll.	2	1	2700
Westark Junior College	0 (2)	1	4006

Based upon projected enrollments for 1980, the future staff needs of the junior college will be:

TABLE LXII

PROJECTED STAFF NEEDS OF JUNIOR COLLEGE LIBRARIES TO 1980

	Projected Enrollments	Prof. Staff Needs 1980	Clerical Staff Needs 1980	Hrs. Stud. Ass'ts Needs 1980
Ark. State Univ.—Beebe Branch	1460	3	6	6480
Central Baptist Coll.	500	2	2	2880
Phillips County Comm. Coll.	NR	(2)	(2)	(2880)
Southern Baptist College	850	2	2	2880
Westark Junior College	1960	5	10	10,880

Only Arkansas State University-Beebe Branch has two clerical workers. Southern Baptist College approaches a satisfactory ratio of student workers while Westark College exceeds such a standard by approximately 1,200 hours of assistance. Thus it would seem that three of these institutions rely heavily upon the one librarian that each employs to perform nonprofessional duties, while two utilize students rather than full-time employees for clerical work.

Since only two junior colleges project significant enrollment increases, their future staff needs will approach more nearly those of the senior colleges, while the others will be able to utilize the minimum numbers set for junior colleges.

Library Facilities:

The nature of college library building needs, problems, and standards was discussed in the previous section on senior colleges. For the junior college group, present conditions were found to be as shown in Table LVI.

Seating space is substandard for all libraries except Southern Baptist College.

Arkansas State University-Beebe Branch has greatly over-crowded shelving space, even with its very inadequate holdings. The others have room for growth; but, except for Southern Baptist College, they would be overcrowded if their collections were adequate.

Work space in all but Westark Junior College is very limited.

Even with modest increases in enrollments projected for 1975 and 1980, the need will be great for the expansion of facilities.

Summary:

With the establishment of the community junior college program the State is anticipating an expansion of this type of higher educational opportunity for his youth. New institutions are likely to be formed to help meet the demands of college-bound students.

As junior colleges grow, their libraries should grow with them. The immediate task will be to overcome present deficiencies. When strong basic collections are established, then expansion may occur. As in the case of the senior colleges, caution should be exercised in the expansion of programs until adequate library resources can be made available. Further, there should be a clear separation of library organizations serving high school and junior college students.

TABLE LXIII
SEATING SPACE, SQUARE FEET OF SHELVING SPACE,
AND VOLUMES PER SQUARE FOOT IN JUNIOR COLLEGE LIBRARIES

	Date Lib. Constr./Renov.	1966-67 Enroll- ment	No. Seats	Per cent- age	No. Volumes	Sq. Ft. Shelving Space	Vols. Per Sq. Ft.	1966-67 Work Space	1966-67 Optimum Work Space
Arkansas State Univ- Beebe Branch	1938-1966	445	60	13	10,100	470	21	80	600
Central Baptist College	NR	246	46	18	5,105	1,452	4	100	600
Phillips County Community College	1950	311	24	8	2,795	516	5	120	600
Southern Baptist College	1966	691	165	24	21,419	2,394	9	496	600
Westark Junior College	1962	1,037	120	11	12,754	1,668	8	884	600

TABLE LXIV

**PROJECTED SEATING SPACE AND SQUARE FEET OF SHELVING SPACE
NEEDED IN JUNIOR COLLEGE LIBRARIES
1975**

	<u>Present Enrollment</u>	<u>No. of Seats</u>	<u>No. of Volumes</u>	<u>Sq. Ft. Shelving Space</u>	<u>Work Space</u>
Arkansas State Univ.- Beebe Branch	1,065	266	25,000	2,500	600
Central Baptist College	500	125	20,000	2,000	600
Phillips County Community Coll.	NR	---	20,000	2,000	600
Southern Baptist College	850	212	25,000	2,500	600
Westark Junior College	NR	---	20,000	2,000	600

TABLE LXV

**PROJECTED SEATING SPACE AND SQUARE FEET OF SHELVING SPACE
NEEDED IN JUNIOR COLLEGE LIBRARIES
1980**

Arkansas State Univ.- Beebe Branch	1,470	370	39,000	3,900	600
Central Baptist College	700	172	34,000	3,400	600
Phillips County Community Coll.	NR	---	34,000	3,400	600
Southern Baptist College	850	212	34,000	3,400	600
Westark Junior College	1,960	490	39,000	3,900	600

An immediate goal of all the libraries ought to be: to meet the Association of College and Research Libraries' standards for their book collections and personnel; to build up stronger periodical lists; to increase financial support to match generally recommended norms; and to provide adequate physical quarters for those libraries now seriously crowded.

Because of the shortage of professional librarians, the junior college libraries should develop without delay a program of centralized purchasing, cataloging, and processing either on a statewide or regional basis. It would be a logical development for them to become audio-visual centers on their campuses if this function is not being performed satisfactorily elsewhere. To eliminate deadwood from their shelves, the libraries ought to follow systematically the Association of College and Research Libraries' standards for weeding their collections; discarding "obsolete materials and editions and broken files of unindexed periodicals; unnecessary duplicates; old recreational periodicals which do not have permanent value; and worn out books." Quality is more important than quantity.

It should be noted that in many instances junior college libraries must serve two distinct groups of students and faculty. The colleges may include traditional academic curricula and technical programs of a specialized nature. Their libraries must therefore develop large and more specialized collections in order to serve the dual purpose.

Library Cooperation: 133

The initial steps in library cooperation were undertaken by the private colleges of the State in 1956 under the initiative of the Arkansas Foundation of Associated Colleges and an appropriation of \$21,000 annually for six years by the Rockefeller Brothers Fund. Each college had certain subject areas for specialization and agreed to supply each other with Library of Congress printed cards for each item purchased with the special fund.

In order to upgrade the periodical collection, a union list, **Periodical Holdings in Arkansas Foundation of Associated Colleges** was compiled in 1957, subsequently revised in 1963, and is currently undergoing the third revision. Special funds were allocated for the purchase of periodicals recommended for the entire group of colleges.

A comprehensive study of the cooperative program was undertaken in 1958 by Dr. A. F. Kuhlman, Joint University Libraries, and issued under the title **The Libraries of Arkansas**. In 1963, a progress survey of the same organization was made by Dr. Robert B. Downs, Dean of Library Administration, University of Illinois.

A liberal interpretation of the interlibrary loan service was made by the group, by loaning anything in the libraries not in use at the time of the request, and by making no charges for the service. The college library mailing the request paid for the postage. Photographic equipment was obtained by each college to facilitate this service. Subsequent to the initial step, more expensive photographic equipment has been obtained by some of the colleges. Microfilm readers and films are available in most of the colleges.

Interlibrary loans are one of the oldest and most popular form of library cooperation, which is carried on by practically all of Arkansas college and university libraries to a varying degree. (See Table LXVI). The advent of microfilm and many forms of photoreproduction has changed the character of such exchanges, particularly for research materials; but loans of original books and periodicals, etc. are still extensive. Of course, the larger universities carry the burden of the service.

TABLE LXVI

**INTER-LIBRARY COOPERATION AMONG ARKANSAS
PUBLIC AND PRIVATE INSTITUTIONS OF HIGHER LEARNING
1966-67**

	Special Agreements Agreements	Interlibrary* Loans	Photoduplication Services	Cooperative Catalogue	Centralized Processing	Union Catalogs	Service to off- campus readers*	Book Catalogs	Cooperative Acquisitions	Union Lists	Participation in Cooperative Cataloging
Ark. A & M	+	+	+	-	-	-	+	-	-	-	-
Ark. A M & N	-	+	+	-	-	-	+	-	-	-	-
Ark. Tech.	-	+	+	-	-	-	+	-	-	-	-
Ark. State Un.	-	+	+	-	-	-	+	-	-	-	-
ASU-Beebe	-	+	-	-	-	-	-	-	-	-	-
Henderson SC	+	+	+	-	-	-	+	-	-	-	-
Southern State	+	+	+	-	-	-	+	-	+	-	-
SCA	+	+	+	-	-	-	+	-	+	-	-
Univ. of Ark.	-	+	+	-	-	-	+	-	-	-	-
Westark	-	+	-	-	-	-	+	-	-	-	-
Phillips Co.	-	-	-	-	-	-	+	-	-	-	-
Cent. Baptist	+	+	+	-	-	-	+	-	-	-	-
Ark. College	+	+	+	-	-	-	+	-	-	+	+
College of Ozk.	+	+	+	-	-	-	+	-	+	+	+
LRU	-	+	+	-	-	-	-	-	-	-	-
Harding	+	+	+	-	-	-	+	-	-	+	+
Hendrix	+	+	+	-	-	-	+	-	+	+	+
John Brown U	-	+	+	-	-	-	+	-	+	+	+
Philander Smith	+	+	+	-	-	-	+	-	-	-	-
Ouachita	+	+	+	-	-	-	+	-	+	+	+
S. Bapt. Coll.	+	+	+	-	-	-	+	-	+	+	+

*Degree of interlibrary loan service and off-campus readers service varies.

Photoduplication is carried on in practically all of the libraries by means of Xerox, Xerox 914, Dennison, SCM photocopier, Coronosta 55, 3-M 107, AB Dick, Micor-photo microfilm readers, and Microfilm reader-printers.

Cooperative processing still remains non-existent among Arkansas libraries, as does cooperative acquisitions. One library reported the receipt of materials under the PL 480 Library of Congress Programs.

The Union List of Periodicals in Arkansas Foundation of Associated College Libraries is in use by the

private colleges. If this could be expanded to include holdings in all colleges, it would prove a beneficial means of furthering interlibrary service.

There should be some agreement on certain items involved in interlibrary service such as: (1) uniform rate of xerox copy; (2) request for loan by Wats line, with confirmation to be mailed on standard forms; (3) an agreement which will permit borrowing and lending of microfilm copy. Mutual understandings on the loan of microfilm would serve a good purpose. Some cooperative program on its purchase would also merit consideration.

Another aspect of library cooperation needed is a Regional Government depository for the State of Arkansas. Housing is a problem in the acquisition of this service. The Arkansas Library Commission is interested in providing this service if their building program is realized.

A legally authorized, centralized agency should be established for collection and distribution of Arkansas State documents to libraries in institutions of higher education in Arkansas requesting them, with the understanding that they will be listed, classified, cataloged, or otherwise prepared and housed for public use.

Dr. Downs, in *Resources of Missouri Libraries*, has this to say about library cooperation:

"Students of library cooperation have generally concluded that the most favorable opportunities for joint effort are in specialized subjects and in little-used types of material. A reasonable degree of duplication must go on among libraries. Every library necessarily procures for its own collections much-used reference works, general-interest periodicals, books needed for undergraduate reserve reading, and other titles in frequent demand without regard to their availability elsewhere. No library—even the largest—can be expected to possess all books; however, sound programs of cooperation will make available valuable additional resources, well beyond what the individual institution could do for itself."

Present and Projected Status of Student Aid Programs: 134

A study of the student aid programs in Arkansas institutions of higher learning had been included as a part of the Comprehensive Study of Higher Education in Arkansas from the beginning of the study. However, a study of greater depths was undertaken as a result of Proposal Number 49 of the Legislative Council of the State of Arkansas dated January 12, 1968. (See Appendix I for a copy of Proposal Number 49). Section I of Proposal Number 49 states:

"That the Commission on Coordination of Higher Education Finance is respectfully requested to make a study, or to include within the scope of its current studies of the higher educational needs in Arkansas, the feasibility of establishing a system of State supported scholarships in this State; thereby enabling deserving Arkansas students to obtain educational opportunities in private supported institutions, as well as public institutions in this State. Such study should include a determination of the extent to which private institutions in this State could accept additional students, and the potential savings to the State of Arkansas of providing such educational opportunities at private institutions."

Since this report will be available upon request, only a summary of the present status of student aid programs in the State and the recommendations of the Committee will be included in this document. The Committee on Student Aid points out that:

FAMILY RESOURCES: 135

Most authorities agree that approximately 50 per cent to 60 per cent of the cost for a student to attend college must be paid from family resources. If this be true, it is virtually impossible for a large number of Arkansas families to take on this obligation as an addition to the family budget. Therefore, the student feels it is necessary to enter into full-time employment, either as a supplement to the family income or to become independent of family support.

The income of the average family in Arkansas is substantially below the National average. Table LXVII shows that in 1966 the family income in the Southern Regional of the United States was \$6,233. For the same period of time the National family income average was \$7,400. Arkansas is usually considered to be economically near the bottom of the Southern Regional estimates which would make the average family income approximately \$6,000 for 1966.

It is significant to note that the constant dollar increase in family income from 1965 to 1966 was more than seven per cent but the cost of living increase made the actual buying power increase only about four per cent.

There is a very high percentage of the family incomes in the State which places the family in a very unfavorable position to supply any substantial funds for college attendance. Table LXVII shows the percentage of families with various income levels in the Southern Region of the United States. Again it is true that family incomes in Arkansas will be lower than these figure indicate, and this will place a larger percentage in the lower income brackets.

TABLE LXVII

MEDIAN FAMILY INCOME—SOUTHERN REGION
IN CONSTANT DOLLARS—1960 THROUGH 1966

1960-\$4,808	1964-\$5,568
1961- 4,786	1965- 5,767
1962- 4,961	1965- 6,233

Source: Bureau of the Census, Current Population Reports, December 18, 1967.

TABLE LXVIII

PERCENTAGE OF FAMILIES BY INCOME
LEVEL—SOUTHERN REGION

Under - \$3,000	21.3 Per cent
\$ 3,000 - \$ 4,999	17.4
5,000 - 6,999	18.5
7,000 - 9,999	21.2
10,000 - 14,999	15.2
Above \$15,000	6.4

Source: Bureau of Census, Current Population Reports, December 28, 1967

Table LXIX sets forth an estimated amount of money which a family could be expected to contribute toward the college expenses of a member of the family. For example, a family with three children and a \$5,000 annual income could be expected to contribute only \$160 toward college expenses. The same family earning the Arkansas average family income of \$6,000 could be expected to contribute only \$350 toward college expenses.

TABLE LXIX
TOTAL EXPECTED PARENTAL CONTRIBUTION
FROM NET INCOME BY SIZE OF FAMILY

Net Income (before Federal tax)	Number of Dependent Children							
	1	2	3	4	5	6	7	8
\$ 4,000	\$ 300	\$ 110						
4,500	410	220						
5,000	530	320	\$ 160					
5,500	640	430	250	\$ 140				
6,000	750	540	350	220	\$ 140			
6,500	870	640	430	300	220	\$ 160	\$ 130	
7,000	990	750	530	390	310	250	230	\$ 170
7,500	1,110	850	620	480	390	330	330	270
8,000	1,220	950	710	560	480	420	400	370
8,500	1,340	1,050	810	640	560	510	480	460
9,000	1,460	1,150	890	720	640	580	570	530
9,500	1,590	1,250	980	810	720	660	650	610
10,000	1,690	1,350	1,060	890	800	750	740	700
10,500	1,810	1,440	1,150	960	880	820	810	780
11,000	1,920	1,540	1,230	1,040	950	890	880	850
11,500	2,030	1,640	1,320	1,110	1,020	960	940	910
12,000	2,150	1,730	1,400	1,190	1,090	1,030	1,010	980
12,500	2,260	1,830	1,480	1,260	1,160	1,090	1,070	1,040
13,000	2,370	1,920	1,560	1,330	1,230	1,160	1,140	1,100
13,500	2,520	2,020	1,640	1,410	1,300	1,230	1,200	1,170
14,000	2,680	2,110	1,720	1,480	1,360	1,300	1,270	1,230
14,500	2,890	2,200	1,800	1,550	1,430	1,360	1,330	1,290
15,000	3,010	2,300	1,880	1,620	1,500	1,430	1,400	1,360

Observations 136

1. Approximately one-half of the families in Arkansas cannot supply any substantial financial aid for their children to attend college.
2. The low-income families have a higher percentage of the children to be educated.
3. Poverty-level families do not look upon the borrowing of money as the way to a better life. Their

experience with indebtedness, lending agencies, loan sharks, and high interest rates convinces them of the futility of borrowing for anything as intangible as education.

4. Many students will not accept educational funds from a family whose living standards are already low.
5. Since many of the reasons for low income can be traced to a low educational level, many students receive no motivation to seek ways of financing a college education.

FEDERAL PROGRAMS:

With the advent of the Russian Sputnik, the Congress enacted the first of what has become an extensive program of financial aid for graduate and undergraduate students. A description of these programs and relevant information about participation by Arkansas institutions is as follows:

National Defense Student Loan Program: 137

The National Defense Education Act of 1958 provided loan funds for students who were majoring in science, mathematics, foreign languages, or preparing to teach in public schools. The law was later changed to allow loans to be made to any area of academic preparation.

Students who teach are allowed to cancel one-tenth of a loan for each year up to a maximum of five years. The law has been revised to allow full cancellation for students who teach in schools designated as located in poverty areas.

There is no interest while the student is in school and for nine months after ceasing to be a student. Interest is three per cent during the repayment period, which varies according to the total owed by the student.

The institutions have almost total control over the selection of students to receive the loans and are responsible for the collection of the loan from the student. No collateral is required and notes are cosigned by a parent or guardian if the student is under 21 years of age.

Institutions are allocated funds by the Federal Government and are required to add one-ninth to the amount received for lending purposes.

The maximum loan to an undergraduate student is \$1,000 per year or a total of \$4,000 for a four-year period and \$1,500 per year for a graduate student or a four-year maximum of \$6,000. Figures showing the average size loan are not available, but it is estimated that the average size loan has been approximately \$600 per year.

Table LXX shows the amount of Federal funds received by Arkansas institutions since the inception of the program along with the matching funds provided by institutions. In addition the institutions have been allowed to reloan any funds which have been collected from borrowers. It has not been possible to ascertain this figure, but it is a sizeable sum.

TABLE LXX

NATIONAL DEFENSE STUDENT LOAN FUNDS AVAILABLE TO ARKANSAS INSTITUTIONS OF HIGHER LEARNING FOR LENDING 1959-1968

Year	Federal Funds 9-10th	Institutional Funds 1-10th	Total Funds
1959	\$ 246,692	\$ 27,410	\$ 274,102
1960	370,155	41,128	411,283
1961	821,536	91,281	912,817

more

TABLE LXX

National Defense Student Loan Funds Available to Arkansas Institutions of Higher Learning for Lending 1959-1968

Year	Federal Funds 9-10th	Institutional Funds 1-10th	Total Funds
1962	1,064,756	118,306	1,183,062
1963	1,262,779	140,309	1,403,088
1964	1,411,302	156,811	1,568,113
1965	1,569,963	174,440	1,744,403
1966	2,111,449	234,605	2,346,054
1967	1,831,677	203,520	2,035,197
1968	<u>1,849,664</u>	<u>205,518</u>	<u>2,055,182</u>
TOTALS	\$12,539,973	\$1,393,328	\$13,933,301

Approximately one-fourth of the loan funds have been handled by private institutions and three-fourths by State supported institutions.

Where only a very small amount of funds were available for lending purposes prior to 1959, there has been in excess of \$13,933,301 loaned to students attending Arkansas institutions during the past 10-year period, and of this amount the institutions have supplied \$1,393,328.

College Work-Study: 138

The College Work-Study Program was added to the student aid package as Title 1C of the Economic Opportunity Act of 1965. The first funds were made available in that year.

Under the provisions of this Act, funds are made available to institutions for the purpose of providing jobs for students who have a high level of economic need. The jobs can be on campus, with the Federal Government paying 90 per cent of the student earnings and the institutions providing 10 per cent. The jobs can be off-campus, for a non-profit organization, with the Federal Government paying 90 per cent of the cost and the employing agency paying the 10 per cent. Since August of 1967, the Federal Government has provided 85 per cent of the funds and the employer has paid 15 per cent. Students have been paid from a minimum of 50 cents per hour to a maximum of about \$3.00 per hour in some instances. Students may work a maximum of 15 per week while attending school and 40 hours per week while working full-time during the summer.

The institutions have been required to spend no less for student labor than they were spending for the average of the three years preceding 1965.

Arkansas institutions have cooperated with the Office of Economic Opportunity in the "Arkansas Plan," an off-campus summer work-study program. Students are selected by the institutions to work for non-profit organizations off the campus which pay a share of the cost. Each student earns approximately \$500 for 10 weeks of work. Table LXXI shows the amount of money paid to Arkansas students during the summers of 1966 and 1967.

TABLE LXXI
COLLEGE WORK-STUDY FUNDS PAID TO ARKANSAS
STUDENTS UNDER THE ARKANSAS PLAN
SUMMER, 1966-1967

Year	Federal Funds	Matching Funds	Total Funds
1966	\$756,228	\$84,025	\$840,253
1967	<u>519,285</u>	<u>46,587</u>	<u>465,872</u>

Table LXXII shows the amount of Federal funds which have been provided to Arkansas institutions to create jobs for students. The guidelines for selection of the students have been provided by the Federal Government. Most institutions were able to fill all available jobs with students from families which fit the family income guidelines.

TABLE LXXII
COLLEGE WORK-STUDY FUNDS PROVIDED
TO INSTITUTIONS IN ARKANSAS 1965-68

Year	Federal Funds	Matching Funds	Total Funds
1965	\$1,230,000	\$136,666*	\$1,366,666
1966	2,987,742	331,971*	3,319,713
1967	2,589,977	287,775*	2,877,752
1968	<u>2,670,766</u>	<u>471,311**</u>	<u>2,142,077</u>
TOTALS	\$9,478,485	\$1,227,723	\$10,706,208

*Represents 10 per cent of total expenditures.
**Represents 15 per cent of total expenditures.

Educational Opportunity Grants: 139

The Congress granted the authority for a program of educational grants under Title IV, Part A of the Higher Education Act of 1965. The Act provided funds for direct grants to be made to students with proven economic need and demonstrated academic ability. After the initial year, the grants are restricted to entering freshmen only and may be continued for four years.

Each institution must determine the family income level of the student; and from guidelines furnished by the Federal Government, determine the amount of funds the family should be able to provide. The students own resources from scholarships, summer employment, and part-time employment while in school or other sources are determined.

The institutions must provide a cost figure which includes fees, tuition, room, board, books, supplies, and personal expenses.

The students may receive Educational Opportunity Grants ranging from \$200 to \$800. The amount awarded cannot exceed one-half of the student-need factor which is the difference between resources and costs. The additional one-half must be supplied to the student in the form of a loan, scholarship, or work.

The Act provides for a bonus of \$200 to be awarded to each student receiving a grant if his grades were in the upper one-half of his respective class. This bonus was funded for 1967-68 but will not be funded for 1968-69.

The total funds received by Arkansas institutions for Educational Opportunity Grants are shown in Table LXXIII.

TABLE LXXIII

**EDUCATIONAL OPPORTUNITY GRANT FUNDS
PROVIDED TO ARKANSAS INSTITUTIONS 1966-68**

Year	Funds Granted
1966	\$ 732,800
1967	1,473,100
1968	1,496,100
TOTAL	\$3,702,000

Guaranteed Loan Program: 140

Using the general policies set up by United Student Aid Funds, the Congress authorized a loan subsidy program. A student can borrow funds from a private lending agency at six per cent simple interest. The Federal Government will pay all the interest while the student is enrolled and for nine months after leaving school. The student pays three per cent and the Federal Government pays the other three per cent during the repayment period which begins nine months after the student leaves school.

Loans can be made for a maximum of \$1,000 per year to an undergraduate student and for a maximum of \$1,500 per year to a graduate student.

The Act stipulated that each state must provide an agency to guarantee the loans to the lending agency. The guaranteeing agency must maintain funds equal to one-tenth of the total loans guaranteed. The Federal Government made a loan to each state of "seed money" to set up a program.

Since Arkansas had no State agency for this purpose, a contract was made with the United Student Aid Funds, Inc., to guarantee loans for Arkansas students. This Agency received \$72,899 in Federal funds for 1967.

Because of some dissatisfaction with the operations of United Student Aid Funds, Inc., it was decided to incorporate an Arkansas agency for the purpose of guaranteeing student loans from private lenders. The Governor provided emergency funds in the amount of \$22,000 to establish a private corporation, Student Loan Guarantee Foundation, in Arkansas. The 1967 General Assembly provided \$58,000 in funds for the operation for 1967-68 and 1968-69.

There was \$95,101 in Federal funds "seed money" provided for 1968. This proved to be insufficient, and several institutions provided \$37,775 in additional funds for the purpose of guaranteeing loans for their students.

There are approximately 270 banks in Arkansas, and to date less than 100 of these have agreed to make loans under the Guaranteed Loan Program. The Arkansas Rural Endowment Foundation has provided substantial loan funds in areas where lending agencies do not participate.

There is ample evidence that private lending agencies have participated in the Guaranteed Loan Program. Table LXXIV shows that Arkansas students have borrowed over \$2,000,000 over a two-year period of time.

TABLE LXXIV

**GUARANTEED LOANS MADE TO COLLEGE STUDENTS
BY PRIVATE LENDING AGENCIES
JULY, 1966—MARCH, 1968**

	No. of Loans	Amount Borrowed	Average Loan
Total United States	757,524	\$610,442,178	\$806
Arkansas	4,019	2,138,957	532
Louisiana	9,782	6,472,409	662
New Mexico	3,905	2,215,058	567
Oklahoma	4,486	3,169,615	706
Texas	8,875	6,198,112	698

Source: Department of Health, Education, and Welfare.

Table LXXV shows the number of loans made to Arkansas students in the various colleges and universities for the period of April 7, 1967, through February 29, 1968.

TABLE LXXV

**LOANS MADE TO ARKANSAS STUDENTS BY ARKANSAS
LENDING AGENCIES AND GUARANTEED BY THE
STUDENT LOAN GUARANTEE FOUNDATION OF ARKANSAS—by INSTITUTIONS
April 7, 1967—February 29, 1968**

Institution	No. of Loans	Total Gross Volume	Per cent of \$ volume
Arkansas College	7	\$ 4,000.00	.002835
A & M College	82	53,282.00	.037764
A M & N College	171	88,278.00	.062567
Arkansas Tech	95	54,929.00	.038931
Arkansas State University	678	412,091.50	.292070
ASU—Beebe Branch	40	16,810.00	.011914
College of the Ozarks	13	8,740.00	.006194
Crowley's Ridge	17	8,510.00	.006031
Harding College	65	41,131.00	.029151
Henderson State College	183	89,457.00	.063403
Hendrix College	51	32,125.00	.022768
John Brown University	3	2,700.00	.001913
Little Rock University	59	32,933.00	.023341
Ouachita Baptist University	82	51,693.00	.036637
Philander Smith College	36	17,024.50	.012065
Phillips Co. Community	2	1,000.00	.000708
Shorter College	1	400.00	.000283
	more		

TABLE LXXV (continued)

Loans Made to Arkansas Students by Arkansas Lending Agencies and Guaranteed by the Student Loan Guarantee Foundation of Arkansas by Institutions April 7, 1967–February 29, 1968

	No. of Loans	Total Gross Volume	Per cent of \$ volume
Southern Baptist College	31	16,715.00	.011846
Southern State College	46	26,916.00	.019076
State College of Arkansas	214	118,927.00	.084290
University of Arkansas	217	140,851.00	.099820
U of A Medical Center	65	58,535.00	.041148
Westark Community College	4	1,162.50	.000823
University of Tenn. (Dental)	23	18,850.00	.013360
Out-of-State (miscellaneous)	154	113,857.50	.080690
TOTALS	2,339	\$1,410,918.00	.999628

Observations

National Defense Student Loans: 141

1. Institutions have been forced to spend a substantial amount of their own fund money for administration of this program.
2. The Federal Government has paid the institutions the amount of one per cent of all outstanding loans for administration during 1967 and again in 1968.
3. Most institutions have done a good job of collecting the funds which they have loaned. However, there are several institutions where the number of accounts in arrears is much too high.
4. The accounts receivable which are in arrears in Arkansas represent 27.1 per cent. This is well above the National figure of 17.9 per cent and the Southwestern Regional figure of 23 per cent.

College Work-Study: 142

1. The off-campus summer program has provided much needed employment to students from low-income families.
2. The on-campus program has made it possible for many students to earn a sizeable amount of money while in school.
3. The institutions have had more student labor available than they had ever dreamed possible.
4. Some institutions have not followed the guidelines of the program and have certified students from families whose income level was above that intended in the program.

Educational Opportunity Grants: 143

1. This program has provided a way to provide a very substantial amount of money to students from low-income families.
2. There has been a tendency for institutions to attempt to look for students with the lowest level of need in order to recruit more students. The intent of the program is to seek out students with the highest need factor.

3. As the program moves into its third year, it is becoming difficult for institutions to provide the sources of funds to match a grant.

Guaranteed Loans: 144

1. The Federal "seed money" is not adequate to guarantee all the loans which students can secure at the present.
2. There are areas of the State where no lending agency participates in the program. This makes it impossible for students living in these areas to secure such loans.
3. Savings and loan associations and credit unions are excellent sources of funds, but few are making loans.
4. Lending agencies are reluctant to lend money at the six per cent simple interest rates, and unless some adjustments are made by the Federal Government the program will falter.
5. Students will borrow educational funds: It is good public relations for a lending agency, and the educational institutions are not burdened with the collection of the funds.

Administration of Financial Aids:

Arkansas colleges and universities have both the responsibility and the accountability for allocating most of the funds which are available for student financial aid. Since most financial aid programs require that the student demonstrate a need for assistance, the obligation for sound and equitable administration of student financial aid programs must be assumed by each institution of higher learning.

In the past there has been a variety of methods used to administer the very limited funds available in Arkansas. With the advent of larger sums of money for student financial aid, it has become necessary to centralize the administration of the funds. The specific form of organization present on a particular campus usually reflects traditional attitudes and work assignments. In Arkansas it is not unusual to find the business officer or job placement officer with the responsibility for the operation of the student aid programs; however, most often it is the student personnel administrator who is charged with the overall administration of such programs. There are varied titles for the person who is in direct charge of student aid, with the designation, Director of Student Aid, being the most commonly used. 145

The functions and duties of financial aid directors are observed to be as follows: 146

1. Be informed about the various types of aid available to students.
2. Prepare and submit applications for funds under the provisions of the Federal Student Aid Programs.
3. Prepare applications and disseminate information about the availability of funds to students on the campus as well as to principals and counselors in the high schools.
4. Interview and receive applications from students who are seeking financial aid.
5. Screen applications and notify the recipients of the approval or rejection of their request.
6. Authorized to the business office the expenditure of funds for each recipient of aid.
7. Maintain a financial aid file on recipients and make required reports to Federal agencies.
8. Conduct exit interviews and see that repayment schedules are given to the student leaving school.

responsible educational bodies is preferable to coordination by external agencies—legislatures or state departments of finance. It is also a majority viewpoint that some kind of formal agency is preferable to the so-called "voluntary" system. Most authorities in higher education have concluded that even if the voluntary type systems were improved in organization and operation, they could hardly be expected to serve statewide interests and needs as effectively as formal coordinating agencies with legally assigned powers and responsibilities.

Dr. Logan Wilson, President of the prestigious American Council on Education, perhaps comes as close as any individual in his ability to speak for higher education as a whole. Dr. Wilson recognizes that a higher education system in the modern world must have effective coordination and planning. Dr. Wilson's views are contained in a publication entitled, "Emerging Patterns in Higher Education." He states: 151

"As it has become more important to the general welfare, higher education has also become more complicated, expensive, and interrelated. Entrenched views of institutional autonomy not only increase unnecessarily the price we must pay for an adequate educational system, but also decrease both its efficiency and effectiveness as a coordinated instrumentality serving the best interests of the Nation as a whole. These observations are not intended to imply that education at any level should be subservient to political needs; and I wish to go further and stress my view that the body politic, like the institutions it contains, should be regarded as a service to individuals. But in a free society important forms of competition must be regulated if chaos is to be avoided. Is there a valid reason for exempting educational institutions from this common requirement?"

THE NEED FOR A COORDINATED SYSTEM OF HIGHER EDUCATION IN ARKANSAS:

In the years prior to World War II, problems of coordination of the various institutional programs hardly existed in Arkansas public institutions of higher learning. Small enrollments and limited financial support for these institutions prevented any major expansion of programs and services during this period. During the fifties and sixties the enrollment picture in the State's public colleges and universities changed dramatically. Existing institutions increased rapidly in enrollment; and there has been a corresponding expansion and extension of curricula into more academic, professional, vocational-technical, and into the higher levels of graduate and advanced professional studies.

As pointed out earlier in this study, the complexities arising from these expansions have already begun to introduce problems in the areas of finance and in the unnecessary, costly overlapping and duplication of programs and services of the various institutions. From an analysis of the individual "Role and Scope Studies" it is clearly evident that if each institution develops its programs and services along the lines envisioned that an extensive, wasteful, and unnecessary duplication of programs and services will occur at all levels and especially at the high-cost upper and graduate levels. This problem may well be compounded by the desire of all but one of the public colleges to be granted university status prior to 1980-81, and by the fact that Arkansas does not currently have a State coordinating agency which has the authority to effectively cope with problems of program duplication.

In addition to the issues discussed above, higher education in Arkansas, in the next decade, will be faced with a multitude of problems of various magnitude and complexity which are statewide in nature. The majority of the membership of the various study committees, the Coordinating Committee, and the consultants for the Comprehensive Study feel that the only alternative to fragmentation and mediocrity in Arkansas' higher education is the establishment of a sound, vigorous, progressive, and coordinated system of higher education in the State.

A PLAN FOR THE COORDINATION OF HIGHER EDUCATION IN ARKANSAS :

Members of each of the various technical committees, members of the Coordinating Committee, and all of the consultants involved in the Comprehensive Study of Higher Education in Arkansas agree that the State must have a central coordinating agency to promote the development of a coordinated system of higher education. In addition, they all feel that the Commission on Coordination of Higher Educational Finance is the appropriate agency to assume this function, and that the Commission must be empowered to become a strong, responsible coordinating agency in areas which are not currently within the purview of the Commission. (See Appendix I for present authority of the Commission). It is recommended that since the title "Commission on Coordination of Higher Educational Finance" will no longer be descriptive of the role of this agency, that it be changed to "The Commission on Higher Education."

The consultants in making the following recommendations concerning the establishment of such an agency have noted that the Commission on Coordination of Higher Educational Finance has made commendable contributions to the improvement of higher education in Arkansas. It is recognized, however, that under its present title and authority, the Commission is entirely too limited in the scope of its responsibilities.

The plans for the organization of the proposed Commission and its functions are recommended under four general headings: Purposes and Principles, Membership and Organization, Responsibilities and Functions, and Prerequisites for Effective Operation.

Purposes and Principles:

The purpose of the Commission in general terms should be to promote the development and operation of a coordinated system of higher education of the highest quality that can be maintained by the resources of the State.

This statement of purpose is based on several underlying principles or assumptions: (1) that appropriate high school educational opportunities will be available to all who seek them and can profit by them; (2) that both the variations among the individuals and in the needs of society require widely diversified kinds of education; (3) that to meet these needs a master plan of higher education must be developed; and (4) that the Commission must be endowed with sufficient authority to put into effect whatever plan of coordination it evolves.

Membership and Organization:

The Commission should be composed of distinguished laymen or women. Generally, in states where coordinating commissions are in effect, the size ranges from seven in Colorado and South Carolina to 18 in Texas. The median size of coordinating boards in 18 states is 11. It is recommended that the new Commission in Arkansas be composed of 10 members, and further that its original membership be the present members of the Commission on Coordination of Higher Educational Finance. Persons connected with State higher educational institutions in any capacity should not be eligible to coordinating commission membership. Also some control should be exercised over the number of alumni from any State higher educational institution who are appointed to board membership.

The length of term of Commission members should be such that a governor cannot appoint a majority of members during his term of office. The terms of coordinating boards in 34 states range from four years to 15

years; the most frequent length of term is six years. Generally the term for members should not expire concurrently with the term of the governor. It is recommended that the length of term for members of the new Commission parallel that of membership on the present Commission on Coordination of Higher Educational Finance.

A coordinating commission should have within its purview the whole range of post-high school education. This means that public community junior colleges as well as the public senior colleges and universities should come under the purview of the Commission.

Responsibilities and Functions:

It appears that two different recommendations are in order regarding the responsibilities and functions of the State Commission; one relates to the State Commission itself and one to the individual institutional boards.

It is recommended that each of the public institutions of higher learning (junior colleges, senior colleges, and universities) retain their individual boards but that the powers and responsibilities of these boards be changed so that they will not conflict with the authority vested in the new State Commission. The individual institutional boards should continue to serve as the Administrative Board of Control and their primary responsibilities should be:

1. Determine management policy.
2. Employ personnel, fix salaries, and assign duties.
3. Contract for other services.
4. Hold custody of all records.
5. Acquire and hold title to property.
6. Responsible for academic administration.
7. Student life.
8. Budget Administration.
9. Purchasing.
10. Plan and construct buildings.
11. Auxiliary enterprises.
 - A. Issue bonds approved by the State Commission.
 - B. Administration of self-liquidating properties.
12. General responsibility for government of the institution.

The State Commission on Higher Education should be empowered to:

1. Prescribe the roles and functions of public institutions of higher learning; determine the need for and approve the establishment and location of new institutions, branches and centers, and approve any change in status of existing institutions, for example, a college becoming a university.
2. Request and receive any information deemed necessary of public institutions of higher learning, and to submit an annual report to the Governor and the Legislature of its activities and policies.
3. Approve or disapprove all new units of instruction, research, or public service. The term "new unit of instruction, research or public service" should include the establishment of a college, school, division, institute, department, new curricula or majors leading to a new degree program, extension service or other unit in any field of instruction, research or public service not therefore included in the program of the institution. The term does not include reasonable and moderate extensions of existing curricula, research, or public service programs which have a direct relationship to existing programs; and the State Commission may under its rule-making power, define the character of such reasonable and moderate extensions.
4. It shall have the power to approve minimum and maximum fees for both in-state and out-of-state students for all public institutions of higher learning.
5. Recommend and approve the level of funding and distribution of State supported scholarships and loan programs and serve as the administrative and coordinating agency for Federally financed student loan and/or scholarship programs.
6. Review, evaluate, and coordinate budget requests for State universities and colleges (including junior colleges) and present to the Governor, prior to each regular session of the General Assembly, a single budget report containing recommendations for separate appropriations to each of them. The recommendations should be based upon standard techniques of objective measurement of need and unit cost figures arrived at through the use of comparative data secured from the various institutions, applied in an impartial and objective manner; and comparisons should be made not only between similar functions of institutions in Arkansas, but also between Arkansas institutions and similar functions of institutions located in other states.
7. The State Commission on Higher Education should conduct continuing studies at the public universities and colleges in all matters involving finance and capital improvements; and should from time to time, submit recommendations to the Governor and the General Assembly and to each institution of higher learning of their findings together with recommended plans for implementing such recommendations. The State Commission should adopt uniform definitions and forms in such matters as financial reporting, academic statistics, and resident status of students for use in making financial recommendations to be followed by the institutions of higher learning.
8. The Commission shall be responsible for continuous master planning and will conduct or cause to be made such studies, surveys, and evaluations of higher education as it believes necessary to carry out its duties. These studies should include, but not be limited to , studies of space utilization and developing guidelines for space utilization; studies of manpower needs and their implications for program development; studies of programs for purposes of identifying and reducing unnecessary program duplication, identifying needs for new programs, analyses of class size, faculty loads and costs of instruction, sabbatical leave and other fringe benefits, analyses of enrollments, extension programs, sources of students, retention of students; and advise institutions on plans and needed improvements.

9. Review all proposed bond issues to be made by any public institution of higher learning and advise the Board of Trustees of the respective institutions as to the economic feasibility thereof as set forth in House Bill Number 328—Act 242 as enacted by the General Assembly of the State of Arkansas, June 17, 1965.
10. Serve as the State agency for the purpose of participating in the grant program under Title I of the Higher Education Facilities Act of 1963 of the Congress of the United States of America as empowered by Act 16 of 1964, Special Session of the General Assembly of the State of Arkansas, and further the Commission shall serve as the State agency for all other Federal programs in higher education requiring a State plan.
11. Continue to act as the "State Community College Board" as set forth in Senate Bill Number 190—Act 404 of the 1967 Regular Session of the General Assembly of the State of Arkansas.
12. The Commission will set up such advisory committees and councils, including a President's Committee, as it deems necessary for the effective coordination of higher education in the State.
13. The Commission shall encourage the cooperation of private institutions in its efforts to plan more effectively for the coordinated development of higher education.

Prerequisites for Effective Operation:

The State of Arkansas is indeed fortunate in having the nucleus of the staff needed for the State Commission on Higher Education in its present Commission on Coordination of Higher Educational Finance. In addition to having a highly capable and dedicated director with National recognition and prestige, the present Commission has on its staff several outstanding young educators who are experts in their own fields. However, the present staff cannot be viewed as adequate to perform the additional duties of the proposed State Commission. This staff must be augmented as services demand. The experiences of coordinating agencies in other states will confirm the need for an adequate staff and the need for sufficient funds to enable the Commission to secure the needed staff and to carry on its operations most effectively. It must be borne in mind that there is a shortage of qualified research personnel and personnel who have had experience in state level coordination of higher education. Therefore, salaries will have to be set at a level high enough to attract competent staff in a competitive market place.

Suggested Organization for the Central Office of the State Commission:

The central office staff of the State Commission should be administered by a director, who is appointed by the State Commission on Higher Education. The chief executive officer must be a person whom the institutional presidents can and do respect as an equal. He must also be one who can work effectively with distinguished leaders of outstanding institutions of higher learning. As pointed out previously, the State is fortunate in that it has such an individual in its present director of the Commission on Coordination of Higher Educational Finance. His leadership and wide experience in the field of higher education will be invaluable as the present Commission goes through the transition of becoming a true coordinating agency.

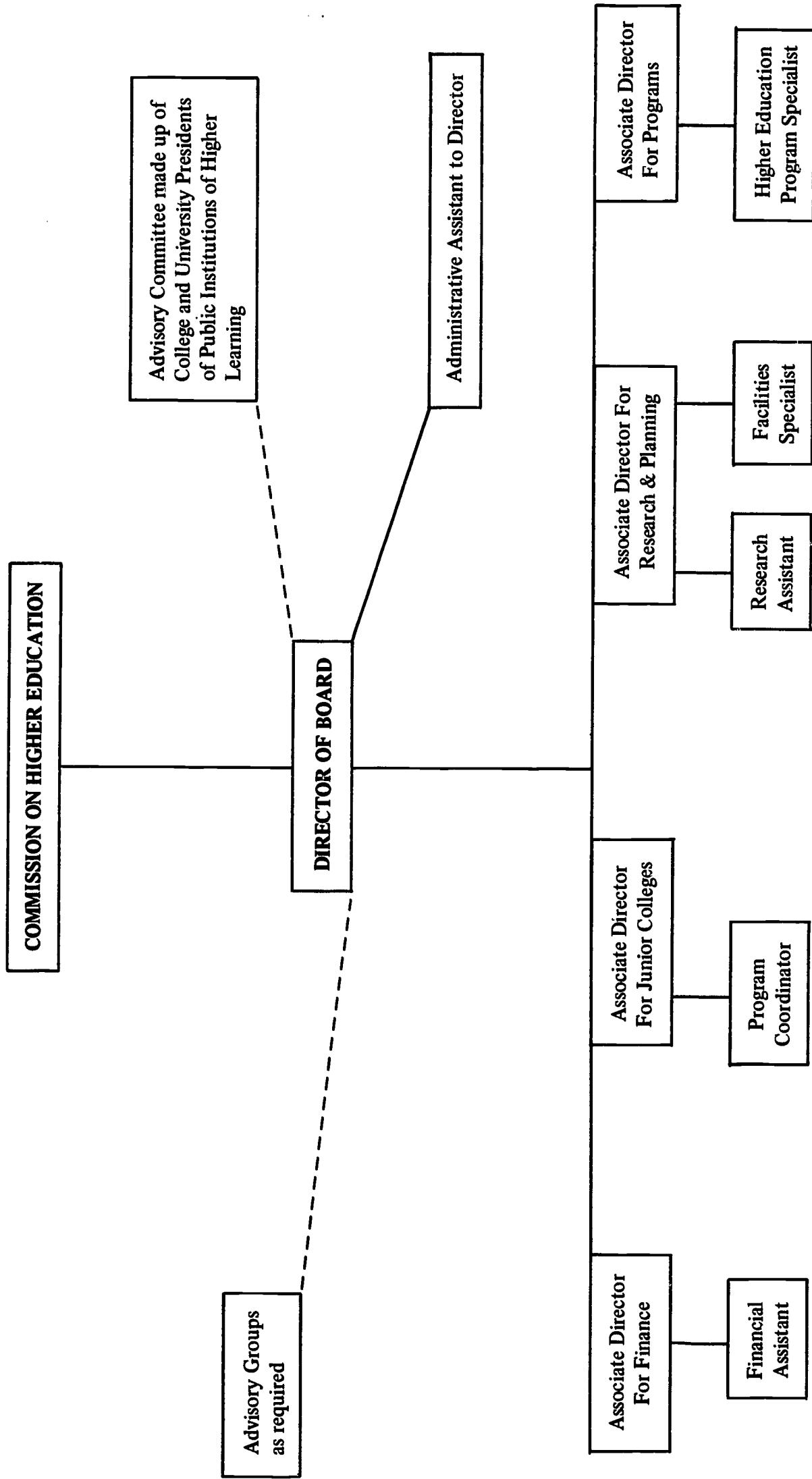
A suggested plan for the organization of the central office staff is outlined in the organizational chart

presented below.

The professional staff indicated in the administrative chart is considered a minimum for the effective operation of the new Commission. Specific duties for the positions indicated should be established by the Commission working with its Director.

There is general agreement among the consultants and the Coordinating Committee that the budget of the present Commission on Coordination of Higher Educational Finance will have to be more than doubled to attract a staff of high quality and provide the services needed for the State. It is recommended that the professional qualifications and salaries of the Director and his staff be comparable to those for similar positions in other states.

A SUGGESTED ORGANIZATIONAL PLAN FOR THE CENTRAL OFFICE – COMMISSION ON HIGHER EDUCATION



Administrative _____

Advisory - - - - -

CHAPTER VIII

INSTITUTIONAL ROLES AND FUNCTIONS

Institutional roles and functions, as presented in this chapter, are based on the assumption that the recommendations for a State level coordinating agency, as recommended in Chapter VII, will be approved and implemented.

The consultants and members of the Coordinating Committee have formulated a statement of the role and function of each present and projected public institution of higher learning in the State which should serve as a guide for the future development of these institutions.

In considering the role of each institution, the consultants and members of the Coordinating Committee examined and weighed many factors and viewpoints. Careful study was given to the present and historical role of each institution and to future developments proposed by these institutions in their individual "Role and Scope" studies. In addition the consultants, members of the Coordinating Committee, members of the President's Committee, and the professional staff of the Commission on Coordination of Higher Educational Finance engaged in extensive deliberations regarding the number and types of institutions and institutional programs which should comprise the Arkansas system of higher education in the future.

Based on this analysis and study, it is recommended that the public higher education system in Arkansas, in the future, incorporate the following elements:

1. A statewide system of public comprehensive community junior colleges offering higher educational opportunities (vocational, technical, continuing education, and college transfer) of two years or less duration and available preferably within daily commuting distance of all citizens of the State. These institutions should be developed as rapidly as the State's financial resources will permit.
2. A core of institutions with emphasis on undergraduate degree programs and on master's degree programs in related fields. However, under no circumstances should these institutions be allowed to establish graduate programs which do not meet the criteria established and approved by the Commission.
3. A core of institutions with emphasis on undergraduate degree programs and extensive offerings at the master's degree level.
4. A residential university with broad undergraduate and master's degree programs and limited doctoral programs.
5. An urban-oriented university offering work at the upper and graduate and professional levels, located in the Little Rock metropolitan area and serving primarily commuting students. The offerings of this institution should include an extensive evening program, broad upper level baccalaureate and master's degree curricula, and doctoral programs appropriate to the growth needs of an urban area.
6. A comprehensive university, primarily of a residential nature, with broad offerings at the undergraduate, master's and doctoral levels, with a number of professional schools giving increased emphasis to graduate and professional study and research.

The consultants and members of the Coordinating Committee believe that the role and function statements which follow constitute a consistent set of elements. It is further believed that the system outlined will provide a varied and flexible program of higher education sufficient to meet the needs of the State to 1980-81.

It is recommended that each institution direct its efforts and operations toward the full realization of its

role in the State system of higher education, and aim at being extremely good in its role rather than being mediocre at something else.

**A Core of Institutions With Emphasis on Undergraduate Degree Programs
And Master's Degree Programs in Related Fields:**

It is recommended that the following group of colleges form the core of institutions with predominant enrollments in undergraduate degree programs and smaller enrollments in master's degree programs.

ARKANSAS AGRICULTURAL MECHANICAL & NORMAL COLLEGE	Head Count Enrollments:	
	Actual, Fall 1967	3,288
	Projected, 1971-72	4,156
	Projected, 1975-76	5,118
	Projected, 1980-81	6,376

Arkansas Agricultural, Mechanical, and Normal College is a State and Land-Grant college. However, in recent years it has evolved into a rather typical Liberal Arts, Teacher Training institution. The consultants and members of the Coordinating Committee foresee Liberal Arts, Science, and Teacher Education to be the continuing major role of the College. The College should devote most of its attention in the foreseeable future to strengthening its present undergraduate programs rather than to implementing any sizeable number of new degree programs. Attention should also be given to strengthening the vocational and technical programs currently offered by the College and to the possible addition of new programs in this area. When a comprehensive public community junior college is established in the Pine Bluff area, Arkansas Agricultural, Mechanical, and Normal College should phase out programs of less than baccalaureate level as rapidly as the junior college can assume this responsibility.

ARKANSAS AGRICULTURAL AND MECHANICAL COLLEGE	Head Count Enrollment:	
	Actual, Fall, 1967	1,849
	Projected, 1971-72	2,358
	Projected, 1975-76	2,967
	Projected, 1980-81	3,781

Arkansas Agricultural and Mechanical College is basically a Liberal Arts, Teacher Training institution even though it does offer some programs in Agriculture, Forestry, and some terminal programs of a Vocational-Technical nature. The consultants and members of the Coordinating Committee foresee Liberal Arts, Science, pre-professional, and Teacher Education to be the continuing major programs of the College. The present program in Forestry should be continued; and the possibility of the University of Arkansas assisting (through research, faculty, etc.) the College in gaining accreditation of this program should be explored. The College should also study the feasibility of establishing a two-year technical program in Forestry.

In the immediate future, Arkansas Agricultural and Mechanical College should direct its major efforts towards strengthening its programs at the undergraduate level rather than towards the addition of any appreciable number of new programs. It is felt that master's degree programs should be offered only when they meet the criteria established for such programs. The actual implementation of these programs should depend on approval by the State level coordinating agency.

Programs above the master's degree level are not envisioned for the College in the foreseeable future.

Arkansas Agricultural and Mechanical College is located in an area in which there is little possibility of establishing a comprehensive community junior college in the immediate future. In view of this, the College should study the possibility of offering additional selected Vocation-Technical programs which can be transferred to a junior college when one is established in the area.

**ARKANSAS POLYTECHNIC
COLLEGE**

Head Count Enrollment :

Actual, Fall, 1967	2,461
Projected, 1971-72	3,109
Projected, 1975-76	4,011
Projected, 1980-81	5,106

Arkansas Polytechnic College, a general college of Arts and Sciences with primary emphasis on the preparation of teachers, was originally established as a Regional Agricultural College. The consultants and members of the Coordinating Committee foresee Teacher Training, with a strong background in Liberal Arts and the Sciences, to be the continuing major emphasis of the College. In the immediate future attention should be given to strengthening current degree programs at the undergraduate level rather than to any major expansion of programs.

Programs at the master's degree level should be offered only when they meet the criteria established for such programs.

No programs above the master's degree level are envisioned for Arkansas Polytechnic College in the foreseeable future.

**SOUTHERN STATE
COLLEGE**

Head Count Enrollment:

Actual, Fall, 1967	2,209
Projected, 1971-72	2,711
Projected, 1975-76	3,289
Projected, 1980-81	4,067

Southern State College is basically a Teacher Training, Liberal Arts college even though it does offer undergraduate degree programs in other areas. The consultants and members of the Coordinating Committee do not anticipate any major changes in the role of this institution in the foreseeable future. Southern State College should devote its primary efforts in the immediate future to strengthening its undergraduate programs in all areas.

Plans are being made by the College to initiate programs at the master's degree level. When these programs meet the criteria for establishing such programs, it is recommended that they be approved and implemented.

Programs above the master's degree level should not be offered by Southern State College in the foreseeable future.

The present programs of a Vocational-Technical nature offered at Southern State College should be continued, and the feasibility of additional programs should be explored. When a public community junior college is established in the area, terminal programs at Southern State College should be phased out and taken over by the junior college.

General Recommendations:

Due to the historical background in enrollments and programs in the core of institutions (Arkansas Agricultural, Mechanical and Normal College; Arkansas Agricultural and Mechanical College; Arkansas Polytechnic College; and Southern State College) which should emphasize undergraduate programs and master's degree programs in a limited number of fields, these institutions have not achieved a growth pattern comparable to other institutions in the State. Therefore, it is felt that the following general recommendations should apply to this group of institutions.

1. In the immediate future the first efforts of these institutions should be to strengthen and expand their presently authorized undergraduate degree programs with primary emphasis being on strengthening programs at the upper level.

2. Master's degree programs should be authorized only in specific areas where the need is clearly evident, and upper level production of a program would indicate that a quality program could be offered.
3. When comprehensive public junior colleges are eventually located in areas served by those colleges, programs of less than baccalaureate level shall be minimized or completely transferred to the junior college as rapidly as possible.
4. These colleges should give attention to the community service responsibilities, especially in areas related to cultural development and enhancement of the localities surrounding the colleges.
5. Consideration should be given to changing the names of institutions where their roles and functions have changed since their establishment.

A Core of Institutions with Emphasis on Undergraduate Degree Programs and Extensive Offerings at the Master's Level:

**HENDERSON STATE
COLLEGE**

Head Count Enrollment:

Actual, Fall, 1967	3,127
Projected, 1971-72	4,178
Projected, 1975-76	5,376
Projected, 1980-81	7,254

Henderson State College has historically been a Liberal Arts, Teacher Training institution. The consultants and members of the Coordinating Committee do not foresee any major changes in this historical role at either the undergraduate or master's degree level. In the immediate future, Henderson State College should devote its major efforts toward strengthening its undergraduate programs in all areas and especially the programs in Liberal Arts, Science, and Teacher Training.

Henderson State College is currently offering one master's degree program with 10 areas of specialization. It is felt that the College should, in the immediate future, work towards strengthening these programs rather than towards adding any appreciable number of new programs. This does not mean that new master's degree programs should not be approved when they meet the criteria for establishing such programs. In fact, it is anticipated that by 1980-81 this institution will be offering extensive master's degree programs.

Henderson State College should not offer programs beyond the master's degree in the foreseeable future

**STATE COLLEGE OF
ARKANSAS**

Head Count Enrollment :

Actual, Fall, 1967	3,686
Projected, 1971-72	5,016
Projected, 1975-76	6,659
Projected, 1980-81	9,001

The State College of Arkansas has traditionally been a Teacher Training, Liberal Arts orientated institution offering both undergraduate and master's degree programs in these areas. The consultants and members of the Coordinating Committee foresee this to be the continuing major role of the College. In the immediate future the College should direct its major efforts toward strengthening present programs at both the undergraduate and master's degree level. As the College develops strength in its undergraduate programs in the Liberal Arts, Sciences, and Education, additional master's degree programs should be considered. By 1980-81 the State College of Arkansas should be offering rather extensive programs at both the undergraduate and master's degree levels.

It is recommended that the College not offer programs beyond the master's degree level in the foreseeable future.

General Recommendations:

Henderson State College and The State College of Arkansas, which comprise the core of institutions which should place major emphasis on undergraduate programs and extensive offerings at the master's degree level, have been offering Master's of Science programs in Education for a number of years. This degree concerns itself primarily with subject matter specifically for teachers: and as a result subject matter areas in Science, Liberal Arts, and Business, where this specialization has occurred, are now relatively strong programs and should be the areas first suited for master's degree work. In view of this, it is felt that the following general recommendations should apply to these institutions.

1. In the immediate future major emphasis should be placed on bringing all undergraduate programs to a level of high quality and to strengthening the present master's degree level programs.
2. Additional master's degree programs should be authorized only in instances where need can be demonstrated and where the proposed programs conform to the criteria established by the Commission on Coordination of Higher Educational Finance.
3. When comprehensive public junior colleges are eventually located in areas served by those colleges, programs of less than baccalaureate level shall be minimized or completely transferred to the junior college as rapidly as possible.
4. Specialist degree programs, professional schools such as Law, Medicine, Engineering, and similar programs, should not be offered by these institutions.
5. These colleges should give attention to their community service responsibilities, especially in areas related to cultural development and enhancement of the localities surrounding the colleges.
6. These institutions should be encouraged to establish cooperative master's and doctoral programs with other public institutions in the State.

A Residential University with Broad Undergraduate and Master's Degree Programs and Limited Doctoral Programs:

ARKANSAS STATE UNIVERSITY

Head Count Enrollment:

Actual, Fall, 1967	5,876
Projected, 1970-71	8,510
Projected, 1975-76	11,536
Projected, 1980-81	16,046

Arkansas State University was, until recently, a general college of Arts and Sciences with primary emphasis on the preparation of teachers. This institution has a long and illustrious history of training teachers for Arkansas and surrounding states. Now that it has been accorded university status, it can be expected to develop programs that will attract an increasing number of students. However, the consultants and members of the Coordinating Committee foresee Teacher Education at both the baccalaureate and graduate levels to be the continuing major programs at this institution. In fact it is felt that Arkansas State University should have as its major role the preparation of teachers and administrators for the public schools, junior colleges, and colleges of the State and Nation. This would mean quality programs in these areas at the baccalaureate, master's and doctoral levels. It is also recommended that Arkansas State University's role be expanded sufficiently to allow it to develop into a residential university offering broad undergraduate and master's degree programs, and limited doctoral programs; and that the initial doctoral programs in this institution should be in Education. However, present undergraduate programs should continue to be strengthened, and master's and doctoral degree programs should be approved only when they meet the criteria established for such programs. New programs at all levels should be approved by the state-level coordinating agency as recommended in Chapter VI of this report.

An Urban-oriented University Offering Work at the Upper and Graduate Levels, Located in the Little Rock Metropolitan Area, Serving Primarily Commuting Students:

During the course of this study the consultants, members of all the various committees, and the professional staff of the Commission on Coordination of Higher Educational Finance spent many hours studying and discussing the higher educational needs of Central Arkansas and more specifically of Pulaski County. Everyone connected with the study in any way has recognized the need for public higher education in Pulaski County and surrounding areas. However, the problem has been to develop a plan for meeting this need which is both educationally sound and economically feasible.

In many of the discussions concerning the foregoing problem the proposed merger of Little Rock University and the University of Arkansas received a great deal of attention. The consultants analyzed the proposed merger agreement entered into by the two institutions; studied and discussed at some length the study done by the Commission on Coordination of Higher Educational Finance as an interim report to the Comprehensive Study of Higher Education (at the request of the Legislative Council, See Appendix I); analyzed the probable effects that such a merger would have on the total higher educational program; reviewed the present programs being offered in the area by Little Rock University and the University of Arkansas; visited Little Rock University to study present physical facilities and the possibility of site and facilities expansion in the future; reviewed the educational background, professional qualification, and academic rank of the present faculty at Little Rock University, and in addition weighted many other factors and viewpoints centering around the proposed merger.

Based upon their comprehensive analysis of the various factors, and studies listed above and on studies of similar mergers in other states, the consultants are in full agreement that opportunities for public higher education should be provided for the citizens of Little Rock and the immediate surrounding areas. They also agree that programs and services should be provided at both the undergraduate and graduate levels; and that the most educationally sound and economically feasible plan for providing these programs would be to establish a public comprehensive community junior college in Pulaski County and an urban-oriented university offering work at the upper and graduate levels, serving primarily commuting students and located in the Little Rock metropolitan area. Assuming that no action will be taken to implement any of these recommendations until additional funding for the operation and capital needs of the present State supported institutions and agencies of higher education, as well as funds for the new venture are assured and in keeping with this plan, the consultants recommend:

1. That approval for the establishing of an urban-oriented university offering programs and services at the junior, senior, graduate, and professional levels be contingent upon the establishment of a comprehensive community junior college in Pulaski County. The junior college should be approved under the policies of Act 404 of 1967 and the guidelines of the Commission on Coordination of Higher Educational Finance.
2. That an urban-oriented university, encompassing the junior, senior, graduate, and professional levels of instruction and serving primarily commuting students be established through a merger of the University of Arkansas and Little Rock University.
3. That the new institution be known as the University of Arkansas at Little Rock.
4. That the Industrial Research and Extension Center, Graduate Institute of Technology, Graduate School of Social Studies, and the School of Law, all located in Little Rock and administered by the University of Arkansas be combined with the new institution.
5. That the new institution be administered by the Board of Trustees of the University of Arkansas, and that the chief administrator of the new institution be directly responsible to the President of the University of Arkansas.
6. That the University of Arkansas at Little Rock offer an extensive evening program, broad upper level

baccalaureate and master's degree curricula, and doctoral and professional programs appropriate to the growth needs of an urban university.

7. That new programs at all levels should be approved only when they meet the criteria established for such programs.

It should be pointed out that the above recommendations follow those of the first preference presented in the Commission on Coordination of Higher Educational Finance's report on the proposed merger. The consultants and members of the Coordinating Committee are in agreement with these recommendations and recommend that the Commission report be used as a guide to the Legislature in its consideration of the proposed merger.

**A Comprehensive University, Primarily of a Residential Nature, with
Broad Offerings at the Undergraduate, Master's and Doctoral Levels and
with a Number of Professional Schools:**

THE UNIVERSITY OF ARKANSAS

Head Count Enrollment:

Actual, Fall, 1967	10,288
Projected, 1970-71	12,562
Projected, 1975-76	15,025
Projected, 1980-81	18,189

Arkansas, unlike some other states, until very recently enjoyed the "mixed blessing" of having only one university. For many years the University of Arkansas served as both the Land-Grant and general-purpose university.

In formulating policies on roles and functions, the consultants and members of the Coordinating Committee agree that a strong case can be made for assigning the University of Arkansas a leading role in the development of strong undergraduate and graduate programs in the Arts and Sciences. The general-purpose university, in its earliest form, essentially was a guild of scholars, with an undergraduate curriculum in the seven Liberal Arts, and usually a graduate School of Theology. The passage of time has seen a tremendous growth in the specialization of knowledge and a corresponding evolution of other academic, technical, and professional curricula; but the Arts and Sciences curriculum retains a central role as a unifying source of more specialized forms of human knowledge, and continues to exert significant qualitative influence on all aspects of scholarship and learning. These values are important, not only within a single university, but throughout the entire system of education—elementary, secondary, collegiate, and graduate-professional. It is, therefore, also important to the long-range goals of educational progress in Arkansas that one of its universities achieve pre-eminence as a general-purpose university. Historical considerations alone identify the University of Arkansas as the institution best suited to this purpose.

An equally strong case can be made for the continued strengthening of the University of Arkansas' role as the institution chiefly responsible for serving the advanced educational needs of Arkansas' business, industry, and agriculture. Accordingly, advanced programs in these fields and in the supporting sciences are necessary. This has been the historical mission of the Land-Grant institutions from their earliest conception. Such institutions have, on the whole, responded effectively to changes that have required increasing sophistication and specialization in academic functions that serve business, industrial, and agricultural needs. The University of Arkansas has been in the vanguard of the 20th century movement, which transformed many Land-Grant colleges into comprehensive universities, although it has often been hampered by inadequate funds to recruit the high-priced talent and to build the expensive facilities needed to serve contemporary requirements. A substantial investment in the University of Arkansas' role as the university most directly related to the State's economy will surely return handsome dividends in terms of accelerated economic growth.

The consultants and members of the Coordinating Committee do not foresee any major change in the dual role of the University of Arkansas as both the general-purpose and Land-Grant university. However, it is

recommended that the University of Arkansas should devote its immediate attention to strengthening present programs and services at the undergraduate, master's, and doctoral levels. The Committee on Graduate-Professional Education and Research views the strengthening of programs at the master's level, and especially at the doctoral level, as being extremely critical. There is some feeling that the State is being provided only minimum-adequate programs at these levels due to marginal financial support.

The consultants and members of the Coordinating Committee feel that, due to relatively low enrollments in advanced graduate and professional programs, limited production of advanced degrees, scarcity of qualified graduate faculty, inadequate physical facilities, and marginal financing, one comprehensive university, primarily of a residential nature, with broad offerings at the undergraduate, master's and doctoral levels, and with a number of professional schools is adequate to meet the needs of the State to 1980-81; and further, that no other institution of this type should be envisioned for the foreseeable future.

**A STATE SYSTEM OF PUBLIC
COMPREHENSIVE COMMUNITY
JUNIOR COLLEGES**

Head Count Enrollment:

2 Colleges--actual Fall, 1967	1,572
2 Colleges--Projected, 1970-71	2,253
9 Colleges--Projected 1975-76	9,498
11 Colleges--Projected, 1980-81	22,463

In 1965, Arkansas embarked on a program that opened the door to the creation of a State system of public comprehensive community junior colleges. Legislation authorizing the establishment of public junior colleges was passed by the General Assembly in early 1965. However, one of the most significant gaps in public higher education continues to be the lack of an adequate number of these institutions. There are only two such institutions in operation at the present time.

The State should continue to develop its system of public community junior colleges as rapidly as it is feasible to do so. These institutions should be designed to offer commuting students higher educational programs in vocational, technical, and continuing education programs and freshman and sophomore offerings for transfer credit in baccalaureate degree programs.

Recommendations and/or plans for the continued development of public comprehensive community junior colleges are presented in Chapter VI of this report and in detail in the report of the Committee on Junior Colleges and Vocational-Technical Programs.

CHAPTER IX

FINANCING HIGHER EDUCATIONAL PROGRAMS AND SERVICES

It is a well-known fact that the improvement of higher educational programs and services in a state upgrades its overall social and economic position. Research has shown a high positive correlation between educational attainment and income level. It follows, then, that states making heavy investments in higher education will tend to prosper, and those neglecting it will not.

Arkansas has a unique opportunity to improve its social and economic conditions by increasing its investment in higher education. In fact this must be done at an ever expanding and accelerating level if Arkansas is to keep step with the rest of the Nation.

The Committee on Finance has analyzed the present and projected needs for higher education in Arkansas and has published their findings in detail form in the report of the Committee. It appears neither practical nor necessary to include in its entirety the analysis made by the Committee in this report. The Committee report has been reproduced in sufficient quantity to be available upon request to members of the Legislature, the Governor, other State agencies, and to persons desiring to study in detail the present and projected financial needs of higher education in the State.

The data on finance presented in this Chapter represents a summary of the report presented by the Committee on Finance.

In its report the Committee on Finance presents the present and projected financial needs of higher education primarily in tabular form along with brief explanations of the tabular data. The Committee also made some comments relative to accounting and budget matters.

General Comments: The following items served as the primary basis for the various projections made by the Committee.¹⁵³

1. Estimates of unit costs of the various academic programs at the State supported institutions during Fiscal Year 1966-1967.
2. Estimates of unit cost at private institutions during Fiscal Year 1966-67.
3. Costs per student at public junior colleges during Fiscal Year 1966-67.
4. Estimates of future student enrollment at the various institutions.
5. Estimates of future construction at the various institutions.
6. Estimates of the effect on expenditures of past and future price increases.
7. Recommendations for the other technical committees for the Comprehensive Study of Higher Education in Arkansas.
8. The trend, during the past 10 years, of State general revenues.

The Committee on Finance considered closely the suggestions and recommendations of the other Committees involved in the study and many of these recommendations were incorporated in the expenditure projections. In some cases the recommendations were not stated in a manner which would enable the Committee on Finance to translate the recommendations into dollar expenditures. One important example was the comment

by one Committee that teaching loads in higher education in Arkansas are relatively heavy, followed by the recommendation that "teaching load" (along with teaching salaries) receive top priority in the formulation of future plans for higher education in the State. Although the Committee on Finance recognized the importance of this recommendation, it was unable to formulate an objective basis for incorporating the recommendation on teaching load into expenditure projections. Therefore, no provision was made in the expenditure projections for reduced teaching loads.

The Committee on Finance also pointed out its awareness of the need for the expenditure of substantial amounts to eliminate deficiencies in equipment and to repair or replace obsolete buildings. The Committee felt that several millions of dollars should be expended as soon as possible for these purposes. However, since these would be "one-time" expenditures which should be made in the near future, they were not included in the expenditure projections, although they might well have been included in the projections for Fiscal Year 1970-71.

New Programs were incorporated into the expenditure projections for academic institutions to the extent that such programs were reflected in the detailed estimates of future enrollments. Also new programs were included in the expenditure projections of the Medical Center, Agricultural Extension Service, Agricultural Experiment Station, Industrial Research and Extension Center, and Graduate Institute of Technology by virtue of the fact that the basis for these projections were prepared by the staffs for these various units.

The Committee on Finance recognized that one of the most important factors with respect to new programs is the possibility of a State supported institution of higher learning in Pulaski County, perhaps through a merger of Little Rock University and the University of Arkansas, as recommended elsewhere in this report. However, the Committee on Finance obviously was not in a position to incorporate this recommendation into its projections. The Committee did note, however, that the implementation of this recommendation would require additional State funds beyond the requirements projected in their report.

Summary of Projected Revenue and Expenditures: In its summary on expenditures and estimated revenues the Finance Committee made two projections, one based on current dollars and one on the inflated dollar. These projections are presented in Tables LXXVI and LXXVII.¹⁵⁴

TABLE LXXVI

**TOTAL EXPENDITURE PROJECTIONS, ARKANSAS
PUBLIC AND PRIVATE COLLEGES AND UNIVERSITIES
FISCAL YEARS 1970-71, 1975-76, and 1980-81
BASED ON CURRENT DOLLARS
(in millions of dollars)**

<u>Projected Expenditures</u>	<u>FY 70-71</u>	<u>FY 75-76</u>	<u>FY 80-81</u>
Operations:			
State Supported Senior Academic Insitutions	45.4	63.4	83.8
Public Junior Colleges	2.2	7.5	13.2
Other State Supported Programs	34.0	43.6	55.7
Private Institutions	<u>13.6</u>	<u>18.3</u>	<u>22.0</u>
Total Operations	<u>95.2</u>	<u>132.8</u>	<u>174.7</u>
Projected Financing:			
State Funds	55.7	78.6	105.0
Other Funds	<u>39.5</u>	<u>54.2</u>	<u>69.7</u>
more			

TABLE LXXVI (continued)

Total Expenditure Projections, Arkansas Public and Private Colleges and Universities Fiscal Years 1970-71, 1975-76, and 1980-81 Based On Current Dollars (in millions of dollars)

<u>Projected Expenditures</u>	<u>FY 70-71</u>	<u>FY 75-76</u>	<u>FY 80-81</u>
Construction:*			
State Supported Senior Academic Institutions	12.2	12.2	9.3
Public Junior Colleges	1.7	1.7	2.1
Other State Supported Programs	8.7	8.7	7.8
Private Institutions	<u>3.4</u>	<u>3.4</u>	<u>2.6</u>
Total Construction	<u>26.0</u>	<u>26.0</u>	<u>21.8</u>
Projected Financing:			
State Funds	12.9	12.9	10.3
Other Funds	<u>13.1</u>	<u>13.1</u>	<u>11.5</u>
Total Projected Expenditures	<u>121.2</u>	<u>158.8</u>	<u>196.5</u>
Total Projected Financing:			
State Funds	68.6	91.5	115.3
Other Funds	<u>52.6</u>	<u>67.3</u>	<u>81.2</u>

*The expenditures shown for the various fiscal years represent average annual expenditures. The cumulative total in 1980-81 for public institutions of higher learning would be \$216,673,723, with the State's share of this total being \$115,484,861. The cumulative total for 1980-81 for the State's academic institutions would be \$124,840,358. Of this total the State's share would be \$83,226,906.

TABLE LXXVII

**TOTAL EXPENDITURE PROJECTIONS
ARKANSAS PUBLIC AND PRIVATE COLLEGES AND UNIVERSITIES
FISCAL YEARS 1970-71, 1975-76, and 1980-81
BASED ON INFLATED DOLLARS
(in millions of dollars)**

<u>Projected Expenditures</u>	<u>FY 70-71</u>	<u>FY 75-76</u>	<u>FY 80-81</u>
Operations:			
State Supported Senior Academic Institutions	51.2	88.0	138.2
Public Junior Colleges	2.3	10.0	20.7
Other State Supported Programs	37.5	57.9	84.6
Private Institutions	<u>15.2</u>	<u>24.6</u>	<u>37.0</u>
Total Operations	<u>106.2</u> more	<u>180.5</u>	<u>280.5</u>

TABLE LXXVII (continued)

Total Expenditure Projections Arkansas Public and Private Colleges and Universities Fiscal Years 1970-71, 1975-76, and 1980-81 Based on Inflated Dollars (in millions of dollars)

<u>Projected Expenditures</u>	<u>FY 70-71</u>	<u>FY 75-76</u>	<u>FY 80-81</u>
Projected Financing:			
State Funds	62.3	107.5	168.5
Other Funds	<u>43.9</u>	<u>73.0</u>	<u>112.0</u>
Construction:			
State Supported Senior Academic Institutions	15.2	15.2	13.6
Public Junior Colleges	2.2	2.2	3.4
Other State Supported Programs	10.9	10.9	13.0
Private Institutions	<u>4.2</u>	<u>4.2</u>	<u>3.8</u>
Total Construction	<u>32.5</u>	<u>32.5</u>	<u>33.8</u>
Projected Financing:			
State Funds	16.1	16.1	16.0
Other Funds	<u>16.4</u>	<u>16.4</u>	<u>17.8</u>
Total Projected Expenditures	<u>138.7</u>	<u>213.0</u>	<u>314.3</u>
Total Projected Financing:			
State Funds	78.4	123.6	184.5
Other Funds	<u>60.3</u>	<u>89.4</u>	<u>129.8</u>

TABLE LXXVIII
STATE GENERAL REVENUES ACTUAL AND PROJECTED FOR
FISCAL YEARS 1967-68, 1970-71, 1975-76, and 1980-81
BASED ON CURRENT DOLLAR VALUES
(in millions of dollars)

	<u>TOTAL</u>	<u>17 Per cent of Total</u>
FY 1967-68 (Actual)		
FY 1970-71 (Projected)	\$209.4	\$35.6
FY 1975-76 (Projected)	261.8	44.5
FY 1980-81 (Projected)	327.2	55.6

TABLE LXXIX

**STATE GENERAL REVENUES ACTUAL AND PROJECTED FOR
FISCAL YEARS 1967-68, 1970-71, 1975-76, and 1980-81
BASED ON INFLATED DOLLARS
(in millions of dollars)**

	<u>TOTAL</u>	<u>17 Per cent to Total</u>
FY 1967-68 (Actual)	\$182.1	\$30.9
FY 1970-71 (Projected)	247.1	42.0
FY 1975-76 (Projected)	355.5	60.4
FY 1980-81 (Projected)	463.8	55.6

The data in Tables LXXX and LXXXI below compare (on current and inflated dollar) the projected need for State funds, with projected State funds which will be available from State general revenues assuming that there is no substantial change in tax rates and no change in the per cent of State general revenues available for higher education.

TABLE LXXX

**COMPARISON OF TOTAL PROJECTED STATE FUNDS NEEDED
PROJECTED STATE FUNDS NEEDED FOR OPERATIONS
AND
PROJECTED STATE FUNDS AVAILABLE FOR FISCAL YEARS
1970-71, 1975-76, and 1980-81
BASED ON CURRENT DOLLARS
(in millions of dollars)**

	<u>FY 70-71</u>	<u>FY 75-76</u>	<u>FY 80-81</u>
Projected State Funds Needed	68.6	91.5	115.3
Projected State Funds needed for Operations	55.7	78.6	105.0
Projected State Funds Available	35.6	44.5	55.6

TABLE LXXXI

COMPARISON OF TOTAL PROJECTED STATE FUNDS NEEDED
PROJECTED STATE FUNDS NEEDED FOR OPERATIONS
AND
PROJECTED STATE FUNDS AVAILABLE FOR FISCAL YEARS
1970-71, 1975-76, and 1980-81
BASED ON INFLATED DOLLARS
(in millions of dollars)

	<u>FY 70-71</u>	<u>FY 75-76</u>	<u>FY 80-81</u>
Projected State Funds Needed	78.4	123.6	184.5
Projected State Funds Needed for Operations	62.3	107.5	168.5
Projected State Funds Available	42.0	60.4	78.8

It is apparent that, given the present State tax structure and pattern of fund distribution the projected needs for State funds will not be met. Unfortunately, it may also be assumed that the obtaining of funds from other sources, as projected, may prove to be difficult.

Operational Expenditures By Function for Public Senior Colleges and Universities
(Regular Programs): 155

The report of the Committee on Finance contains data on projected expenditures per full-time equivalent student, expenditures by level and area for semester credit hours produced, expenditures by function and projections on the current and inflated dollar for all these categories. It is felt that the summary tables based on current dollar values for Fiscal Year 1970-71, 1975-76, and 1980-81 are the only materials that should be included in this report since the detail information is available in the Finance Committee Report. The following tables, which appear to be self-explanatory, contain data on projected operational expenditures for the public senior colleges and universities for the fiscal years cited above.

TABLE LXXXII

PROJECTED OPERATIONAL EXPENDITURES
PUBLIC SENIOR COLLEGES AND UNIVERSITIES
FISCAL YEAR 1970-71

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURE</u>
General Administration and Student Services	\$ 2,939,000
General Institutional Expense	4,576,00
Teaching Salaries	20,531,000
Departmental Operating Expense	2,655,000
Instructional Administration	1,693,000

more

TABLE LXXXII (continued)

Projected Operational Expenditures, Public Senior Colleges and Universities Fiscal Year 1970-71

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURE</u>
Organized Activities Relating to Instruction	524,000
Library	3,739,000
Organized Research	1,085,000
Extension and Public Service	730,000
Operation and Maintenance of Physical Plant	2,614,000
Building Maintenance	985,000
Custodial Care	809,000
Scholarships and Student Aid	1,499,000
Other Items	987,000
Total Projected Expenditures	<u>\$45,366,000</u>

TABLE LXXXIII

**PROJECTED OPERATIONAL EXPENDITURES
PUBLIC SENIOR COLLEGES AND UNIVERSITIES
FISCAL YEAR 1975-76**

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURE</u>
General Administration and Student Services	\$ 3,954,000
General Institutional Expense	6,156,000
Teaching Salaries	29,538,000
Departmental Operating Expense	3,651,000
Instructional Administration	2,342,000
Organized Activities Relating to Instruction	706,000
Library	4,350,000
Organized Research	1,514,000

more

TABLE LXXXIII (continued)**Projected Operational Expenditures, Public Senior Colleges and Universities Fiscal Year 1975-76**

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURE</u>
Extension and Public Service	985,000
Operation and Maintenance of Physical Plant	3,520,000
Building Maintenance	1,326,000
Custodial Care	953,000
Scholarships and Student Aid	3,073,000
Other Items	<u>1,328,000</u>
Total Projected Expenditures	\$63,396,000

TABLE LXXXIV

**PROJECTED OPERATIONAL EXPENDITURES
PUBLIC SENIOR COLLEGES AND UNIVERSITIES
FISCAL YEAR 1980-81**

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURES</u>
General Administration and Student Services	\$ 4,992,000
General Institutional Expense	7,773,000
Teaching Salaries	40,992,000
Departmental Operating Expense	4,781,000
Instructional Administration	3,107,000
Organized Activities Relating to Instruction	892,000
Library	3,855,000
Organized Research	2,043,000
Extension and Public Service	1,243,000
Operation and Maintenance of Physical Plant	4,442,000
Building Maintenance	1,673,000

more

TABLE LXXXIV (continued)
Projected Operational Expenditures, Public Senior Colleges and Universities Fiscal Year 1980-81

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURES</u>
Custodial Care	1,148,000
Scholarships & Student Aid	3,351,000
Other Items	<u>3,473,000</u>
Total Projected Expenditures	\$83,785,000

Projected Operational Expenditures for Public Junior Colleges: 156

The projected operational expenditures for Arkansas' recommended statewide system of public comprehensive junior colleges for Fiscal Years 1970-71, 1975-76, and 1980-81 are presented in Table LXXXV.

TABLE LXXXV
ALL PUBLIC JUNIOR COLLEGES
PROJECTION OF OPERATIONAL EXPENDITURES
SELECTED FISCAL YEARS

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
Number of Institutions	4	10	10
Number of Equivalent Full-Time Students	2957	10,256	17,999
Cost per Equivalent Full-Time Student	\$731	\$731	\$731
Projected Total Expenditure	\$2,161,567	\$7,497,136	\$13,157,269
Projected Amount of State Support	\$1,226,000	\$3,906,000	\$6,881,000

Projected Operational Expenditures for Special Programs in Public Colleges and Universities: 157

The projected expenditures for the University of Arkansas Medical Center, Agricultural Extension Service, Agricultural Experiment Station, Industrial Research and Extension Center, Graduate Institute of Technology and the subsidies for out-of-state enrollments in Dentistry and Veterinary Medicine for Fiscal Years 1970-71, 1975-76, and 1980-81 are presented in the tables below.

TABLE LXXXVI
UNIVERSITY OF ARKANSAS MEDICAL CENTER
PROJECTION OF OPERATIONAL EXPENDITURES
SELECTED FISCAL YEARS

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
General Administration and Student Services	\$489,000	\$695,000	\$860,000
General Institutional Expense	984,000	1,399,000	1,819,000
Teaching Salaries	3,059,000	4,374,000	4,935,000
Departmental Operating Expense	794,000	1,087,000	1,205,000
Instructional Administration	178,000	251,000	283,000
Organized Activities Related to Instructional Research	64,000	90,000	117,000
Library	205,000	296,000	325,000
Organized Research and Other Sponsored Programs	4,458,000	6,384,000	8,334,000
Extension and Public Service	23,000	34,000	45,000
Operation & Maintenance of Physical Plant	681,000	963,000	1,247,000
Building Maintenance	266,000	372,000	481,000
Custodial Care	594,000	844,000	1,097,000
Hospital Costs	7,587,000	9,012,000	11,716,000
Other Items (Including Student Aid Post-Graduate Training)	<u>846,000</u>	<u>1,235,000</u>	<u>1,665,000</u>
Total Projected Expenditures	\$20,228,000	\$27,036,000	\$34,129,000

TABLE LXXXVII
UNIVERSITY OF ARKANSAS AGRICULTURAL EXTENSION SERVICE
PROJECTION OF OPERATIONAL EXPENDITURES
SELECTED FISCAL YEARS

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
Projected Expenditures	\$5,820,000	\$6,871,000	\$8,571,000
Projected State Support	3,375,000	4,674,000	6,384,000

TABLE LXXXVIII

**UNIVERSITY OF ARKANSAS AGRICULTURAL EXPERIMENT STATION
PROJECTION OF OPERATIONAL EXPENDITURES
SELECTED FISCAL YEARS**

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
Projection of Expenditures	\$6,094,000	\$6,783,000	\$9,272,000
Projected State Support	3,466,000	3,865,000	5,266,000

TABLE LXXXIX

**UNIVERSITY OF ARKANSAS INDUSTRIAL RESEARCH AND EXTENSION CENTER
PROJECTION OF OPERATIONAL EXPENDITURES
SELECTED FISCAL YEARS**

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
Projected Expenditures	\$639,000	\$993,000	\$1,316,000
Projected State Support	510,000	735,000	1,039,000

TABLE LXXXX

**UNIVERSITY OF ARKANSAS GRADUATE INSTITUTE OF TECHNOLOGY
PROJECTION OF OPERATIONAL EXPENDITURES
SELECTED FISCAL YEARS**

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
Projection of Expenditures	\$1,004,000	\$1,218,000	\$1,453,000
Projected State Support	990,000	1,201,000	1,433,000

TABLE LXXXXXI

**SUBSIDIES FOR OUT-OF-STATE ENROLLMENTS
PROJECTION OF OPERATIONAL EXPENDITURES
SELECTED FISCAL YEARS**

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
Dentistry Subsidy	\$158,281	\$211,567	\$267,094
Veterinary Subsidy	54,350	72,647	91,713

Projected Operational Expenditures for Private Institutions of Higher Learning in Arkansas: 158

A summary of projected operational expenditures (based on current dollar values) for all the private institutions in Arkansas for Fiscal Years 1970-71, 1975-76, and 1980-81 is presented in the tables below:

TABLE LXXXII

**ALL PRIVATE INSTITUTIONS
PROJECTION OF OPERATIONAL EXPENDITURES
FISCAL YEAR 1970-71**

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURES</u>
General Administration and Student Services	\$ 1,437,000
General Institutional Expense	1,272,000
Teaching Salaries	4,232,000
Departmental Operating Expense	1,092,000
Instructional Administration	246,000
Organized Activities Relating to Instruction	3,000
Library	631,000
Organized Research	105,000
Extension and Public Service	87,000
Operation and Maintenance of Physical Plant	936,000
Building Maintenance	235,000
Custodial Care	192,000
Other Items	<u>2,253,000</u>
Total	<u>\$12,721,000</u>

TABLE LXXXXIII

ALL PRIVATE INSTITUTIONS

PROJECTION OF OPERATIONAL EXPENDITURES

FISCAL YEAR 1975-76

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURES</u>
General Administrations and Student Services	\$ 1,874,000
General Institutional Expense	1,659,000
Teaching Salaries	5,520,000
Departmental Operating Expense	1,426,000
Instructional Administration	321,000
Organized Activities Relating to Instruction	4,000
Library	823,000
Organized Research	136,000
Extension and Public Service	114,000
Operation and Maintenance of Physical Plant	1,222,000
Building Maintenance	309,000
Custodial Care	251,000
Other Items	<u>2,940,000</u>
Total	\$16,599,000

TABLE LXXXXIV
ALL PRIVATE INSTITUTIONS
PROJECTION OF OPERATIONAL EXPENDITURES
FISCAL YEAR 1980-81

<u>EXPENDITURE FUNCTION</u>	<u>TOTAL EXPENDITURES</u>
General Administration and Student Services	\$ 2,337,000
General Institutional Expense	2,070,000
Teaching Salaries	6,886,000
Departmental Operating Expense	1,777,000
Instructional Administration	400,000
Organized Activities Relating to Instruction	5,000
Library	1,027,000
Organized Research	170,000
Extension and Public Service	142,000
Operation and Maintenance of Physical Plant	152,000
Building Maintenance	383,000
Custodial Care	261,000
Other Items	<u>4,388,000</u>
Total	\$19,998,000

A summary of operational expenditures projections, showing the amount of State support needed, for regular, special, and junior college programs is presented in Table LXXXXV.

TABLE LXXXXV

**SUMMARY OF EXPENDITURES PROJECTIONS SHOWING AMOUNT
OF STATE SUPPORT NEEDED IN FISCAL YEARS 1970-71, 1975-76, and 1980-81**
(in thousands of dollars)

	FY 1970-71		FY 1975-76		FY 1980-81	
	Total Expenditures	State Support Need	Total Expenditures	State Support Need	Total Expenditures	State Support Need
Senior State Supported Institutions (Standard Programs)	45,366	35,385	63,396	49,449	83,785	65,352
Public Junior Colleges	2,162	1,226	7,497	3,906	13,157	6,881
Private Institutions	13,611		18,259		21,998	
Medical Center	20,228	10,557	27,036	14,059	34,129	17,747
Dentistry Subsidy	158	158	512	512	657	657
Veterinary Subsidy	54	54	203	203	263	263
Agricultural Extension Service	5,820	3,375	6,871	4,674	8,571	6,384
Agricultural Experiment Station	6,094	3,466	6,783	3,865	9,272	5,266
Industrial Research & Extension Center	639	510	993	735	1,316	1,039
Graduate Institute of Technology	<u>1,004</u>	<u>990</u>	<u>1,218</u>	<u>1,201</u>	<u>1,453</u>	<u>1,433</u>
TOTAL	95,136	55,721	132,768	78,604	174,601	105,022

Projected Expenditures for Capital Outlay: 159

The Commission on Coordination of Higher Educational Finance is currently conducting a study of facility needs at all institutions (public and private) of higher learning in the State. This study will be available for distribution in the near future, therefore, only a summary of capital needs based on tentative estimates of the Commission study is presented in this report. It should be pointed out that the projections for facility needs presented below are projections prepared by the Committee on Finance (based on tentative estimates of the Commission) and may well be expected to differ somewhat from the final recommendation of the Commission Study.

TABLE LXXXXVI

**FINANCIAL NEEDS FOR CAPITAL IMPROVEMENTS IN ARKANSAS
PUBLIC AND PRIVATE COLLEGES AND UNIVERSITIES
FISCAL YEARS 1970-71, 1975-76, and 1980-81***

	<u>FY 1970-71</u>	<u>FY 1975-76</u>	<u>FY 1980-81</u>
State Supported Senior Academic Institutions	12.2	12.2	9.3
Public Junior Colleges	1.7	1.7	2.1
Other State Supported Programs	8.7	8.7	7.8
Private Institutions	<u>3.4</u>	<u>3.4</u>	<u>2.6</u>
TOTAL	<u>26.0</u>	<u>26.0</u>	<u>21.8</u>
Projected Financing:			
State Funds	12.9	12.9	10.3
Other Funds	<u>13.1</u>	<u>13.1</u>	<u>11.5</u>

*The expenditures shown for the various fiscal years represent average annual expenditures. The cumulative total in 1980-81 for public institutions of higher learning would be \$216,673,723, with the State's share of this total being \$115,484,861. The cumulative total for 1980-81 for the State's academic institutions would be \$124,840,358. Of this total the State's share would be \$83,226,906.

Administration of Budgeting and Related Activities: 160

During the period covered by this study much information and data will be required for planning and decision making at the State level. It is, of course, absolutely necessary that this information be accurate and comparable between institutions. During the course of this study it became evident that certain items are handled differently by the various institutions.

Uniform Chart of Accounts:

Since all accrediting agencies, National college and university business officers associations and Federal agencies have accepted a uniform standard for accounts, it is necessary that college accounts within the State conform. The accepted standard is that described in Volumes I and II, (and soon to be published Volume III) of "College and University Business Administration." These volumes were financed and sponsored by the American Council on Education, and have already been put into practice by Arkansas institutions of higher learning but have not always been interpreted uniformly. The Commission on Coordination of Higher Educational Finance has

advanced uniformity greatly by their definitions in "Instructions for Preparing and Submitting Requests for Legislative Appropriations."

It is recommended that all interested agencies including the Commission on Coordination of Higher Educational Finance, State Department of Administration, Legislative Audit Division, Legislative Council, and the Arkansas Association of College and University Business Officers, work closely together to develop adequate definitions and instructions to supplement recommendations of "College and University Business Management" to insure a uniform chart of accounts.

Object Code:

The State Department of Administration periodically requires expenditure information by object from all State agencies including higher education. An examination of recent requirements indicates that the published object codes are not adaptable to the information requested.

It is recommended that an adequate and acceptable object code be developed and adopted by all State agencies. Agencies should be permitted to enlarge codes as necessary for management information, but all State reporting should conform exactly to the adopted code.

Uniform Reports:

Under present accounting and reporting procedures, it is necessary that frequent reports be submitted as problems are isolated. These reports are often meaningless to some degree because of data which is not comparable under the Uniform Chart of Accounts and Object Code headings above. It is possible that annual reports and operating budgets could provide a degree of pertinent information.

Adequate resources should be made available to develop a comprehensive management information system for higher education in the State which would be a fully computerized system utilizing the most advanced available techniques in operations research and systems analysis. Such a system should incorporate the establishment of a uniform data base that would indicate modes of input, storage, processing and output, and procedures for their control. This in turn would provide avenues for analysis and long-range planning, thereby making possible the development of a meaningful system of program budgeting. Through inter-computer links, the Commission on Coordination of Higher Educational Finance would have access to the entire data base for all its institutions for purposes of administration, budget control, forecasting, and planning for maximum utilization of resources.

Under this system, information would be readily available through the Commission on Coordination of Higher Educational Finance for Legislative Council and State Administration Department studies as well as various Federal and foundation grant programs.

It is therefore recommended that the system described above be developed to permit the optimum utilization of resources for the achievement of common statewide higher education objectives.

RECOMMENDATIONS:

The consultants and members of the Coordinating Committee agree in general with the financial needs indicated in the report of the Finance Committee and with the recommendations made and implied in their report. On the basis of their analysis of the Finance Committee's report and other data included in previous chapters of this document, the consultants and members of the Coordinating Committee recommend that:

1. The Commission on Coordination of Higher Educational Finance should continue to serve as the agency responsible for coordinating the financial operations of the public institutions of higher learning in the State.

2. If Arkansas hopes to maintain even its present position among other states in the field of higher education, the minimum financial support for operational expenditures should be the expenditures projected in current dollar values by the Committee on Finance (these expenditures have been summarized in tabular form in this chapter).
3. It is felt that Arkansas has the potential to improve its relative position among other states in regard to most criteria used in evaluating a state's higher educational programs and services. If this improvement is to be realized, the support for operational expenditures should approximate the expenditures projected in inflated dollars by the Committee on Finance.
4. Since no State funds were made available for capital improvements at the various State supported institutions of higher learning for the 1967-69 biennium, the building programs at most of these institutions have suffered materially. In fact facility needs in some instances have reached or exceeded the critical point. If adequate State funds are not provided immediately to remedy this situation, the total higher education endeavor in the State may suffer irreparable damage. Therefore the State should consider as a minimum the expenditures for capital improvements that have been tentatively agreed upon by the Finance Committee and the Director of Higher Education Facilities Study (these expenditures are discussed in the report of the Finance Committee and the Facilities Study recommendations will be available in the near future).
5. All interested State agencies including the Commission on Coordination of Higher Educational Finance, State Department of Administration, Legislative Audit Division, Legislative Council, and the Arkansas Association of College and University Business Officers should work together to develop adequate definitions and instructions to supplement recommendations of College and University Business Management and to insure a uniform chart of accounts.
6. An adequate and acceptable object code should be developed and adopted by all State agencies. Agencies should be permitted to enlarge codes as necessary for management information, but all reporting should conform exactly to the adopted code.
7. Adequate resources should be made available to develop a comprehensive management information system for higher education in the State which would be a fully computerized system utilizing the most advanced techniques in operations research and systems analysis.

FOOTNOTES

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APPENDIX I

LEGISLATIVE ACTS, PROPOSALS, AND RESOLUTIONS

**COMMISSION ON COORDINATION OF
HIGHER EDUCATIONAL FINANCE**

September 1, 1967

ACT 490 OF 1967 (REGULAR SESSION)

A BILL

FOR AN ACT to be entitled: "An Act to make an Appropriation to the Commission on Coordination of Higher Educational Finance for the purpose of making a comprehensive study of the higher educational needs of this State and to report the findings and recommendations resulting therefrom to the Sixty-Seventh General Assembly; and for other purposes."

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. There is hereby appropriated, to be payable from the State General Services Fund, for the Commission on Coordination of Higher Educational Finance for the purpose of making a comprehensive study of the higher educational needs of this State and for the preparation of a report containing findings and recommendations resulting from such study to the Sixty-Seventh General Assembly, the sum of . . . \$75,000.00.

SECTION 2. The Commission on Coordination of Higher Educational Finance may use the funds appropriated herein, together with federal funds or other funds that may be made available for such purposes, for the employment of experts and consultants, the payment of professional fees, for necessary travel expenses, and all other necessary and incidental expenses that may be necessary in connection with making a comprehensive study of the higher educational resources and needs of this State and in the preparation of a report and recommendations for presentation to the Governor and the Sixty-Seventh General Assembly of this State in regard to such study.

SECTION 3. All laws and parts of laws in conflict herewith are hereby repealed.

SECTION 4. It is hereby found and determined by the General Assembly that there has been a significant increase in enrollment in the state supported institutions of higher learning in this State; that estimates of future enrollment anticipates further significant increases in enrollment at the respective institutions; that the development of a comprehensive plan for the future growth and expansion of the higher educational opportunities of this State is essential if the State is to make maximum utilization of its limited resources in providing the best possible higher educational opportunities for the citizens of this State; and, that the immediate passage of this Act is necessary in order that a broad and comprehensive study might be immediately undertaken for the purpose of developing recommendations to be completed for consideration prior to the time of convening of the 1969 session of the General Assembly. Therefore, an emergency is hereby declared to exist and this Act being necessary for the immediate preservation of the public peace, health and safety shall be in full force and effect from and after its passage and approval.

Act 490 approved April 4, 1967.

225/226/227

**COMMISSION ON COORDINATION OF HIGHER
EDUCATIONAL FINANCE
June 22, 1965**

**ACT 24 OF 1961 (FIRST EXTRAORDINARY SESSION)
As Amended By
Act 35 of 1963 Regular Session**

AN ACT to Provide for the Coordination of the Financial Support of Higher Education in the Existing Institutions of Higher Learning in This State; and for Other Purposes.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. In order to provide for greater coordination of financing the higher education program of this State, there is hereby created the "Commission on Coordination of Higher Educational Finance," hereinafter referred to as the "Commission." Said Commission shall serve in an advisory and recommending capacity to the General Assembly and the Governor of this State with respect to all matters pertaining to the financial operation, and capital improvements at the State supported institutions of higher learning, as follows:

1. University of Arkansas
2. Arkansas State College, including the Beebe Branch thereof
3. Southern State College
4. Arkansas A. & M. College
5. Arkansas Polytechnic College
6. Arkansas State Teachers College
7. Henderson State Teachers College
8. Arkansas A. M. & N. College

SECTION 2. The Commission shall consist of ten (10) members appointed by the Governor and confirmed by the Senate. The terms of office of members of the Commission shall be ten (10) years, with the term of office of one member expiring and one new member terms beginning on January 1 of every year after the year 1961. Provided, that the respective terms of the members first appointed to the Commission shall be determined by lot in an open public meeting of the Commission. No more than two members of the Commission may be appointed from any one congressional district, as such districts were established by Act 297 of 1951. No more than three members of the Commission at any one time shall be graduates of the University or any other state college. No members of the Boards of Trustees of the University or any state college shall be eligible for membership on the Commission.

SECTION 3. The Commission shall elect from its own number a chairman and such other officers as may be deemed necessary to carry on its business. The Commission shall meet at least once during each calendar quarter and at such other times upon call of the chairman or any other four (4) members. The Commission may, at such time as it deems necessary, meet on the campuses of the respective institutions of higher learning of this State. Members of the Commission shall serve without compensation but shall be reimbursed for their actual expenses incurred in attending meetings of the Commission and performing their official duties.

SECTION 4. Functions of Commission. (1) The Commission shall receive, evaluate and coordinate budget requests for the University and state colleges and present to the General Assembly and to the Governor, prior to each regular session of the General Assembly, a single budget report containing budget recommendations for separate appropriations to each of them. The recommendations of the Commission may be based upon standard techniques of objective measurement of need and unit cost figures arrived at through the use of comparative and

Act 24 of 1961 (1st Extraordinary Session)
As Amended by Act 35 of 1963

verified data secured from the various institutions, applied in an impartial and objective manner, and comparison shall be made not only between similar functions of institutions in Arkansas but also between Arkansas institutions and similar functions of institutions located in other states. Provided, that nothing herein shall be construed to prohibit any institution of higher learning in this State from submitting any matter pertaining to the financial operation and needs of said institutions to the General Assembly or to the Governor at any time.

(2) The Commission shall conduct continuing studies at the University and state colleges in all matters involving finances and capital improvements, and shall, from time to time, submit recommendations to the Governor and the General Assembly, and to each institution of higher learning, of their findings together with recommended plans for implementing such recommendations. The Commission shall adopt uniform definitions and forms in such matters as financial reporting, academic statistics and resident status of students for use in making its financial recommendations, to be followed by the institutions of higher learning where the Commission finds that the use of such uniform definitions and forms will promote its functions authorized in this act.

SECTION 5. The Boards of Trustees of the University and state colleges shall continue to exercise their present functions and powers, and nothing in this Act shall be construed to deprive, limit, or in any way alter or change any of the existing statutes and constitutional provisions pertaining to or governing said Boards of Trustees.

SECTION 6. The Commission shall employ an Executive Director who shall be an experienced educator in the field of higher education and of demonstrated competency in the fields of institutional management and finance. His salary shall be commensurate with the president of the State institutions of higher learning. The commission will employ such other staff, including clerical and secretarial employees as shall be needed in the execution of its functions. Provided that none of the staff members selected shall be chief administrative officers or assistants to the administrative officers of the University of Arkansas or the several state colleges. The central office of the Commission shall be maintained in Little Rock.

Act 24 Approved September 8, 1961.
Act 35 Approved February 8, 1963.

**COMMISSION ON COORDINATION OF HIGHER
EDUCATIONAL FINANCE
September 1, 1967**

S. B. NO. 190 - ACT 404

A BILL FOR AN ACT TO BE ENTITLED:

"AN ACT to Authorize the Establishment of Community Junior Colleges as Provided in Amendment 52 of the Constitution, Adopted at the November 1964 General Election; to Provide the Method of Establishing Community Junior College Districts; for the Selection of Governing Boards Thereof; the Levy of Taxes Therefor; and Other Purposes."

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS

SECTION 1. DEFINITIONS. As used in this Act:

(a) 'Community Junior College means an educational institution established or to be established by one or more counties or cities, of this State and offering specialized or comprehensive programs of instruction extending not more than two (2) years beyond the high school level, which may include but need not be limited to courses in technological and occupational fields or courses in the liberal arts and sciences, whether or not for college credit.

(b) "Capital outlay expense" means those funds devoted to or required for the acquisition and improvement of land; acquisition, construction, remodeling, alteration, addition or enlargement of building or other structures; and initial purchase of furniture, apparatus, and other equipment.

(c) "Operating expense" means those funds devoted to or required for the regular or ordinary expense of the college, including administrative, maintenance and salary expenses, but excluding capital outlay expenses, student activity expenses, and expense for intercollegiate athletics.

(d) "District" means the geographic area included within the one or more contiguous counties or cities or any combination thereof participating in or intended to participate in the establishment and maintenance of a Community Junior College.

(e) "State Community Junior College Board" means The Commission on Coordination of Higher Educational Finance.

SECTION 2. STATE COMMUNITY JUNIOR COLLEGES. Pursuant to the authority granted by Amendment No. 52 to the Constitution of the State of Arkansas, there is hereby authorized the establishment of Community Junior college districts to be formed, financed and governed as hereafter provided. The tax authorized to be levied under Amendment No. 52 shall not exceed ten (10) mills on the taxable real and personal property of the district. The millage approved by the electors shall be a continuing levy until reduced as provided herein.

SECTION 3. The Commission on Coordination of Higher Educational Finance is designated to act as the state-wide coordinating board for the Community Junior Colleges established in conformity with the Act. When the Commission on Coordination of Higher Educational Finance is acting as the "State Community Junior College Board" the Commissioner of Education shall become an ex officio non-voting member of such Board. The said Board shall have the following duties and powers:

(a) It shall function as a coordinating agency between the Community Junior Colleges, the public schools, Universities and State Colleges, and other educational institutions in Arkansas. In relation to the senior institutions of the State, it shall work with them and the Community Junior Colleges to develop the criteria for transfer of credits of students entering senior institutions from State Community Junior Colleges.

(b) It shall set forth the criteria in conformity with, but not limited to, the provisions of this Act for the establishment of Community Junior College districts. In addition to the specific requirements set forth in this Act, the criteria shall provide for size and location of sites for the proposed college, nature and extent of the program, size and type of buildings required.

(c) It shall develop objective criteria for the determination of the requirements in Section 7 of this Act.

(d) It shall upon request of said citizens' groups develop a tentative budget to determine the annual cost of the operation of such a program, and the amount of this cost which would be an obligation of the proposed district in accordance with this Act.

(e) It shall act in an advisory capacity concerning changes and expansion of the program of said institutions.

(f) It shall establish the required minimum qualifications for the President of a Community Junior College.

(g) It shall develop a uniform budget format and accounting and reporting procedures to be used by all Community Junior Colleges.

(h) It shall, with the Joint Legislative Auditing Committee, determine that State funds are used in conformity with the grants of such funds.

SECTION 4. LOCAL CONTROL. (a) Local control of Community Junior Colleges shall be vested in a local board, to be composed of nine (9) qualified electors of the Community Junior College District. The initial board shall be appointed by the Governor with the advice and consent of the Senate. At the expiration of the term of members, as hereinafter provided, his successor shall be elected from the district at large at the same time and in the same manner as provided by law for State and county officials. In selecting members for the initial board and at subsequent elections their residence shall be such as to give representation to each part of the district. The term of office shall be for six (6) years. The members of the initial board shall draw for terms and positions as numbered one (1) through nine (9). Successor candidates shall be elected at the biennial general election and shall run for the numbered position vacated by the outgoing member.

(b) The powers and duties of the local board shall be as follows:

(1) To select its own Chairman and such other officers as it may deem desirable, from among its own membership.

(2) To adopt and use a seal.

(3) To determine, with the advice of the State Junior College Board, the educational program of the college.

(4) To appoint, with the advice of the State Community Junior College Board, and fix compensation and term of office of a president of the college, who shall be executive officer for the board and for the college.

(5) To appoint, upon nomination of the president, members of the administrative and teaching staffs and to fix their compensation and terms of employment.

(6) Upon recommendation of the president, to appoint or employ such other officers of the college, agents

and employees as may be required to carry out the provisions of this Act and to fix and determine their qualifications, duties, compensation, terms and conditions of employment.

(7) To grant diplomas and certificates.

(8) To enter into contracts.

(9) To accept from any government or governmental agency, or any other public or private body, or from any other source, grants or contributions of money or property which the board may use for or in aid of any of its purposes.

(10) To acquire, own, lease, use and operate property, whether real, personal, or mixed, which is necessary for college purposes.

(11) To dispose of property owned by the college which is no longer necessary for college purposes upon such terms and conditions as shall meet the requirements for State agencies.

(12) To exercise for the right of eminent domain in the manner authorized by law for state supported institutions of higher education.

(13) To make such rules and regulations not inconsistent with the provisions of this Act or with the rules and regulations of the State Community Junior College Board as are necessary for the proper administration and operation of the college.

(14) To exercise all other powers not inconsistent with the provisions of this Act which may be reasonably necessary to the establishment, maintenance and operation of a Community Junior College.

SECTION 5. FORMATION OF JUNIOR COLLEGE DISTRICTS. (a) Upon request of a citizens' group, representing a proposed Community Junior College District, the State Community Junior College Board shall assist in the study of such proposed District to determine whether its formation would meet the requirements of this Act and the criteria established by the State Board for the formation of such District. As provided in Section 3 of this Act, the State Agency shall make all necessary studies to determine the feasibility of the proposed District.

(b) Upon certification of the State Board that the formation of the proposed District is feasible and would conform to the requirements of this Act, the qualified electors so such proposed distirct may, by petition, have an election called to determine whether such district shall be formed.

(c) The petition calling for such an election shall be signed by not less than ten per cent (10%) of the qualified electors of said district, based upon the total number of votes cast therein for all candidates for the office of Governor in the last general election. Where there is more than one county or city in the proposed District, such petitions shall include signature of not less than ten per cent (10%) of the qualified electors of the entire proposed district as determined by the total votes cast for all candidates for the office of Governor at the last general election in each such county or city. The petition calling for said special election shall describe the area of the proposed district, the proposed maximum rate of millage to be levied for the support of the district, and the amount of such millage that may be pledged for bonded indebttness purposes of the district. The petition shall be filed with the Secretary of State of Arkansas. Within ten (10) days of the receipt and verification by the Secretary of State of the sufficiency of such petitions, he shall notify the County Board of Election Commissioners in the county or counties in the proposed Community Junior College District that an election shall be held in the area described in the petition, as certified by the Secretary of State, to determine whether such District shall be formed. The date of such election shall be set by the Secretary of State at a time no less than thirty (30) days from the date of notification of the Board of Election Commissioners.

(d) The ballot for the election shall state the purpose of the election, giving the names of the county, counties, city or cities in the proposed district, the proposed rate of ad valorem tax to be voted upon, and the purposes for which such tax shall be used, including the amount thereof to be pledged for bonded indebtedness purposes. The form of the ballot shall be as follows:

For the establishment of a Community Junior College District, and authorizing the levy of a tax of not to exceed...mills on the taxable property of the district to be used for the support of such Community Junior College, and authorizing the pledging of not to exceed...mills of the aforementioned tax for the issuance of bonds at interest not to exceed five per cent (5%) per annum, to mature not more than 30 years from the date of issuance to provide funds for the construction and furnishing of buildings and facilities for such college.

Against the establishment of a Community Junior College District.

(e) The election shall be conducted by the County Board of Election Commissioners in the manner provided by law for special elections, and the ballots thereat shall be marked by each elector, and the returns thereof shall be tabulated, certified and reported as provided by law. If a majority of the qualified electors of the proposed district voting thereon at such election shall vote FOR the establishment of such district, the same shall be established in the manner provided in this Act. If a majority of the qualified electors of the proposed district voting thereon at such election shall vote AGAINST the establishment of such district, the same shall not be established and no new election for the establishment thereof shall be held for a period of one (1) year thereafter. Provided, that if the proposed district includes more than one county and/or city, the majority required for the purposes of this Act shall include not only a majority of the electors of the proposed district voting such issues at the election but shall also include a majority of the electors voting on such issue in each county and/or city of the proposed district.

(f) If the election fails because of an adverse vote in one or more counties or cities in a proposed district of multiple counties or cities, a proposed reconstituted district eliminating the county, city, counties or cities which cast the adverse vote in an election may be called within ninety (90) days, provided the State Community Junior College Board certifies that the proposed new district meets all of the criteria for such an election.

(g) The ad valorem tax levied by a district, or so much thereof as shall be necessary, shall be a continuing levy until reduced in the manner provided herein. Such tax shall be collected and remitted to the district in the manner now provided by law for taxes levied by school districts.

(h) Said Community Junior College District may be dissolved and the millage tax voted repealed, with the exception of the millage required to service any outstanding bonds against the districts, upon approval thereof by a majority of the qualified electors of said districts, voting on said issue at an election called for such purpose. The question of dissolving the district and repealing the millage tax shall be submitted to the electors of the district at a special or general election upon petitions therefor, provided that the initiation of petitions calling for such election shall be in accordance with the requirement set forth in paragraph (c) of this section, for the formation of the district.

(i) When it is proposed that a county or city join an existing Community Junior College District, an election may be held in the proposed city or county to be added to determine whether the proposed reconstituted district shall be established after a petition requesting that the county or city be permitted to join the district has been signed by a committee broadly representative of the county or city to be added and approved by the board of the existing district. The procedures for an election to be held in the petitioning county or city to determine whether the proposed reconstituted district shall be formed, including the adoption of the millage tax for support of the Community Junior College in effect in the existing district, shall be the same as required in establishing an original Community Junior College District.

SECTION 6. FINANCING COMMUNITY JUNIOR COLLEGES. (a) General operations. Funds for the general operation of the educational program of the college shall be provided from the following sources: (1) student fees; (2) taxes levied by the district; and, (3) state revenues. The costs of general operations shall be as nearly as possible divided between the aforementioned three sources. Prior to the beginning of each fiscal biennium, a proposed budget for operations for each year of the biennium shall be developed by each Community Junior College and shall be submitted to the State Board for review and approval. When such budget has been approved and certified by the State Board, the governing board of the College shall establish student fees at a level to yield one-third of the cost as established for the operating budget. The State Board shall certify to the Governor and the General Assembly the amount necessary from state revenues for each such college. The governing board of each college shall certify, within the time provided by law, to the tax-levying agency of each county or city of the district the aggregate millage to be levied for the district for operating purposes and indebtedness purposes, and the same shall be levied and collected in the manner provided by law. If the amount of such budget to be supported from taxes levied by the district shall be in excess of the amount to be produced from taxes then authorized for the district, after allowing for revenues pledged for indebtedness purposes, the governing board of the college shall certify the additional millage required to the County Board of Election Commissioner, provided that such millage together with the rate then levied does not exceed ten (10) mills, and the question of the levy thereof shall be placed on the ballot at the next following General Election. If the proposed additional millage shall be approved by the majority of the qualified electors of the district voting on such issue at such election, the same shall be a continuing levy until reduced as provided herein. Whenever the governing board of any college shall determine that the rate of tax levied by the district, including the amount hereof pledged of indebtedness purposes, is greater than the proportionate part of the operating budget of such district to be allocated thereto as certified by the State Board, the governing board shall certify the reduced rate of millage to the respective county officials of each county of the district charged with the duty of levying taxes in such county, and the reduced rate of millage shall be levied and shall be extended on the tax books of such county as the rate of tax due such Community Junior College District until a greater amount of tax shall be certified by the governing board of such college as authorized herein. For the purposes of making the reduction in millage levies as authorized above, the maximum rate of tax authorized by the electors of a Community Junior College District shall be levied as provided hereinabove whenever it shall be determined that such reduced rate of tax will produce the pro rata share of the operating budget of the district apportionable to taxes to be levied by the district. Provided, that in no event may the maximum rate of tax levied by a district exceed ten (10) mills on the taxable real and personal property of the district.

(b) Capital Outlay. (1) Each Community Junior College District shall be responsible for all capital costs of the district, including, without limitation, the acquisition of lands the constructing of improvements, buildings and facilities thereon and therein and the acquisition and installation of initial equipment. Replacement of initial equipment shall be considered as an operating cost. For the purposes of financing the cost of acquiring lands, constructing improvements, buildings and facilities thereon and therein and acquiring and installing initial equipment, providing for interest on bonds during construction and for not to exceed six months thereafter, and providing for the expenses of issuing bonds, the district is hereby authorized and empowered to issue bonds from time to time. The bonds shall be authorized by Resolution of the local board. The bonds may be coupon bonds, payable to bearer or may be registrable as to principal only with interest coupons, or may be registrable as to both principals and interest without coupons and may be made exchangeable for bonds of another denomination, which bonds of another denomination may in turn be either coupon bonds payable to bearer or bonds registrable as to principal only with coupons, or bonds registrable as to both principal and interest without coupons; the bonds may be in such form and denominations; the bonds may have such date or dates; the bonds may mature at such time or times, not exceeding thirty years from date; the bonds may bear interest payable on such dates and at such rate or rates, provided that no bonds may bear interest at a rate exceeding five per cent (5%) per annum, the bonds may be payable at such place or places within or without the State of Arkansas; the bonds may be subject to such terms of redemption in advance of maturity at such prices, including such premiums; and the bonds may contain such terms and provisions, all as the local board shall specify in the authorizing Resolution. The Authorizing Resolution may contain any other terms, covenants and conditions that are deemed desirable by the local board, including, without limitation, provisions authorizing the issuance of bonds in series from time to time on a parity of security, those pertaining to the custody and application of bond proceeds, the maintenance of various funds and reserves, the nature and extent of the security, the rights, duties and obligations of the district and the holders and registered owners of the bonds.

and obligations of the district and the holders and registered owners of the bonds.

(2) All bonds issued hereunder shall be sold at public sale on sealed bids. Notice of the sale shall be published once a week for three (3) consecutive weeks in a newspaper published in the City of Little Rock, Arkansas, and having a general circulation throughout the State of Arkansas, with the first publication to be at least twenty (20) days prior to the date of sale. Bonds may be sold at such price as the district may accept, but in no event shall any bid be accepted which shall be less than par and accrued interest on the basis of the interest rate or rates bid, nor shall any bid be accepted which specifies an interest rate in excess of five per cent (5%) per annum. The award, if made, shall be to the bidder whose bid results in the lowest net interest cost determined by computing the aggregate interest cost at the rate or rates bid and deducting therefrom any premium bid.

(3) Bonds issued hereunder shall be general obligations of the district primarily secured by a pledge of the millage voted for their payment, which, as above specified, shall be continuing annual tax which shall not be reduced, until the principal of, interest on and paying agent's fees in connection with all bonds of the district, to the payment of which the continuing annual tax involved is pledged, shall have been paid or provided for; provided, however, the district may apply any surplus revenues each fiscal year (being revenues from collections of the continuing annual tax in excess of the amounts necessary to insure the payment of the principal, interest and paying agent's fees of the bonds as the same become due) either to the redemption of bonds prior to maturity or may transfer the surplus to the operating fund of the district as the district shall determine and specify in the Resolution of the local board authorizing the issuance of the bonds. The district may additionally secure any bonds issued hereunder, if it so determines, by a pledge of surplus income derived from the operation of any auxiliary income producing activities now or hereafter authorized by law, but, in order for any such additional security to exist, the nature and extent thereof must be specified in the Resolution of the local board authorizing the issuance of the bonds.

(4) Bonds shall be executed by the manual or facsimile signature of the Chairman of the local board and by the manual signature of the Secretary of the local board. Coupons attached to the bonds shall be executed by the facsimile signature of the Chairman of the local board. In case any of the officers whose signatures appear on the bonds or coupons shall cease to be an officer before the delivery date of the bonds and coupons, his signature shall nevertheless be valid and sufficient for all purposes. The seal of the district shall be affixed or imprinted upon the bonds.

(5) Bonds may be issued for the purpose of refunding any bonds issued under the authority of this Act. Refunding bonds may be issued upon authority of a Resolution of the local board, with the approval of the State Board, without the necessity of submitting the questions of issuing the refunding bonds or the continuation of the continuing annual tax as security therefor to the electors of the district, provided:

(i) The last maturity date of the refunding bonds is not later than the last maturity date of the bonds being refunded, and

(ii) The refunding bonds do not bear a greater rate or rates of interest than the bonds being refunded, and

(iii) The total amount required to pay principal and interest on the refunding bonds as the same become due must be less than the total amount required to pay principal and interest of the bonds being refunded as the same become due must be less than the total amount required to pay principal and interest of the bonds being refunded as the same become due.

Any refunding bonds shall enjoy the same security for their payment as was enjoyed by the bonds being refunded, including particularly, and without limitation, any continuing annual tax voted and pledged to the payment of the bonds being refunded and any additional security enjoyed by the bonds being refunded pursuant to the authority set forth in this Act. Refunding bonds shall be sold at public sale on sealed bids in accordance with the provisions of this Act pertaining to the sale of bonds authorized hereunder. Provided, however, before any bonds are issued by a local board, it shall provide the State Community Junior College Board with a copy of

its proposal to issue the bonds, including a copy of the proposed bond indenture, and receive a certificate from the Community Junior College Board that the proposal meets the requirements as set forth by the State Board on the issuance of revenue bonds.

SECTION 7. MINIMUM REQUIREMENT FOR ESTABLISHMENT OF A COMMUNITY JUNIOR COLLEGE DISTRICT. Prior to the calling of an election for the establishment of a Community Junior College District the State Community Junior College Board must certify that proposed Junior College will meet the following requirements.

(1) Site: That a site which meets the criteria established by the State Board is available.

(2) Students: That by objective analysis and projection the full time student equivalent would be a minimum of 300 at the fall enrollment of the third year of operation.

(3) Local Income: That the assessment for ad valorem tax purposes of the proposed district, as published by State Assessment at the Arkansas assessment Coordination Department of Public Service Commission, at the millage rate proposed would produce sufficient income for the district to discharge its financial obligation as required in the Act.

(4) Size of District: The size of the district shall be such that all students within the district are within commuting distance of the college.

SECTION 8. STUDENT FEES. (a) Tuition. The student fees, or tuition, authorized in Section 6 of this Act shall be used for educational purposes only.

(b) Activity Fees. To provide for a student activity program at the college, the governing board may levy a student activity fee not to exceed Twenty Dollars (\$20.00) per semester per student.

(c) Out-Of-District Tuition. Tuition for students who come from without the district shall pay an out-of-district fee equal to twice the fee charged for in-district students.

(d) Special fees. The governing board of each community junior college may levy special fees for special programs, short courses, seminars or like activities at a level to defray the cost of such special activities.

SECTION 9. LIMITATIONS. (a) No tax shall ever be levied or collected for the construction of dormitories, nor shall any Community Junior College construct, maintain or operate any dormitory for the housing of students..

(b) Participation of Community Junior Colleges in intercollegiate athletic programs shall be limited to basketball and spring sports.

SECTION 10. If any provision of this act or the application thereof to any person or circumstances is held invalid, such invalidity shall not effect other provisions or applications of the Act which can be given effect without the invalid provision or application, and to this end the provisions of this Act are declared to be severable.

PROPOSAL NO. 16

WHEREAS, the University of Arkansas Board of Trustees and the Board of Trustees of Little Rock University have announced that agreements have been reached for proposed merger of LRU with the University of Arkansas as a Little Rock Unit; and

WHEREAS, the joint announcement of such proposed merger indicated that the implementation of the merger would be dependent upon the General Assembly providing the necessary funds for the assumption of this additional financial obligation by the State of Arkansas; and

WHEREAS, it is essential that immediate studies of all aspects of the proposed merger, and the immediate and long-range financial implications thereof, be made in order that the General Assembly may be fully advised regarding all aspects of the proposed merger when enabling legislation is introduced.

NOW, THEREFORE

BE IT PROPOSED BY THE LEGISLATIVE COUNCIL OF THE STATE OF ARKANSAS:

SECTION 1. That the Commission on Coordination of Higher Educational Finance is respectfully requested to immediately undertake studies of the proposed merger of Little Rock University with the University of Arkansas, with such study to determine the following:

(a) An inventory of all property, both real and personal, of the Little Rock University to be acquired by the State of Arkansas by such merger, including all outstanding indebtedness and other obligations to be assumed by the State of Arkansas.

(b) The adequacy of the existing facilities of the Little Rock University to accomodate the anticipated enrollment of a Little Rock Campus of the University of Arkansas, and the extent to which such properties could be expanded to meet future enrollment obligations, and the anticipated cost of such capital improvement expansions. In making such evaluation, a determination shall be made as to whether the existing LRU campus could be expanded to meet future needs or whether a new campus would have to be established at a different location to meet the obligations of a Little Rock Branch of the University of Arkansas.

(c) A determination of the most efficient and feasible administrative means of meeting the higher educational needs of Central Arkansas.

(d) The anticipated immediate and long-range estimates of enrollment and operating expenditures for the operation of a Little Rock Unit of the University of Arkansas, including a determination of the existing financial resources of Little Rock University that would be available to the State of Arkansas for the continued operation of said facility.

(e) An evaluation of the higher educational needs of the Central Arkansas region, including a determination of whether a major portion of such higher educational needs should be met through the establishment of the Community Junior College, financed under the provisions of Amendment 52 to the Constitution of the State of Arkansas, with the Senior College and Graduate level instruction being financed by a state-operated facility.

(f) A determination of all other aspects of the proposed merger of Little Rock University with the University of Arkansas, and alternated means of meeting the higher educational needs of the central Arkansas area, as may be indicated by such study.

SECTION 2. The Board of Trustees of the University of Arkansas, of Little Rock University, and the various state-supported institutions of higher learning are requested to cooperate with the Commission on Coordination of Higher Educational Finance in furnishing information and data that will be required in

connection with this study.

SECTION 3. Upon conclusion of its study, the Commission on Coordination of Higher Educational Finance is requested to furnish copies of such study and the Commission's recommendations in regard thereto for consideration by the Legislative Council and the members of the General Assembly at the earliest possible date. Upon receipt of such report and recommendations of the Commission on Coordination of Higher Educational Finance, the Legislative Council shall make such study and hold such public hearings as the Council may determine to be necessary to submit its recommendations to the General Assembly.

Respectfully submitted,

s/Robert Harvey
Robert Harvey, Senator
17th Senatorial District

Filed: July 12, 1967

PROPOSAL NO. 19

WHEREAS, the Board of Trustees of the University of Arkansas and the Little Rock University have announced that agreements have been reached to merge LRU with the University of Arkansas thereby establishing a Little Rock campus of the U. of A.; and

WHEREAS, the announced plans for such merger indicate that additional funds and enabling legislation must be provided by the General Assembly before such merger may become a reality; and

WHEREAS, The Commission on Coordination of Higher Educational Finance is currently studying the higher education needs of the State, pursuant to legislation enacted by the 1967 General Assembly, and it is essential that such study concentrate specific attention to the proposed merger and also evaluate alternate solutions to the higher education needs of central Arkansas:

NOW, THEREFORE

BE IT PROPOSED BY THE LEGISLATIVE COUNCIL OF THE STATE OF ARKANSAS:

That the Commission on Coordination of Higher Educational Finance is requested to (1) study all aspects of the proposed merger of LRU with the University of Arkansas for the purpose of determining the immediate and long range financial implications of such merger; (2) determine the value of the existing facilities of LRU and the adequacy of such facilities to meet the anticipated expansion requirements for a major state supported institution in central Arkansas; (3) determine whether the higher educational needs of central Arkansas would be best served by the establishment of a Little Rock Branch of the University of Arkansas or whether a separate institution with its own board of trustees should be established, and the cost thereof; and, (4) determine the role and service to be rendered by a central Arkansas institution of higher learning in relation to the existing state supported institutions.

Upon receipt of the report and recommendations from the Commission on Coordination of Higher Educational Finance, the Legislative Council shall make its own study and evaluation of this matter and present recommendations to the General Assembly.

Respectfully submitted,

s/Ray S. Smith, Jr.
Ray S. Smith, Jr., Representative
District 20

Filed: July 21, 1967

PROPOSAL NO. 37

WHEREAS, the 1967 regular session of the General Assembly directed the Commission on Coordination of Higher Educational Finance to study the overall higher educational needs of this State; and

WHEREAS, the Legislative Council has requested the Commission on Coordination of Higher Educational Finance to study the various aspects of the proposed merger of Little Rock University with the University of Arkansas, with such study to determine the most efficient and feasible administrative means of meeting the higher educational needs of Central Arkansas; and

WHEREAS, State College of Arkansas at Conway is centrally located and has existing classrooms, libraries dormitories and other facilities ideally suited for conversion to a University to meet the higher educational needs of Central Arkansas; and

WHEREAS, the development of the Interstate Highway System makes State College of Arkansas readily accessible to the population of Central Arkansas, including students in Little Rock who are within easy commuting distance to Conway.

NOW, THEREFORE,

BE IT PROPOSED BY THE LEGISLATIVE COUNCIL OF THE STATE OF ARKANSAS:

That the Commission on Coordination of Higher Educational Finance is requested to include within its study of the overall higher educational needs of the State of Arkansas, and its study of the proposed merger of Little Rock University with the University of Arkansas, and evaluation of the feasibility of State College of Arkansas being designated and developed as a major University to serve Central Arkansas.

Respectfully submitted,

s/ Cecil L. Alexander

**Cecil L. Alexander
Representative, District 14**

Filed: October 19, 1967.

PROPOSAL NO. 49

WHEREAS, enrollment at the state-supported institutions of higher learning in this State has more than doubled in the past ten years, and it is anticipated and that said enrollment will increase significantly in the near future; and

WHEREAS, state-supported institutions of higher learning are finding it necessary to seek substantial increase in their operating appropriations and are requesting construction funds to meet the classroom requirements for increased enrollments; and

WHEREAS, the State of Arkansas is fortunate in having a number of privately supported institutions of higher learning to serve the educational needs of the people of this State; and

WHEREAS, more than one third (1/3) of the states are now providing scholarship funds that permit recipients to attend their public or private institutions to study in any academic area; and

WHEREAS, the Tennessee College Association, comprised of the state's public and private institutions, has requested the Governor of Tennessee to initiate, as soon as possible, a comprehensive study of a state-supported scholarship program in Tennessee; and

WHEREAS, it is believed that a study should be made of the feasibility of instituting a program of state-supported scholarships to deserving college students in this State, making it possible for the State to make maximum use of college opportunities in private, as well as public institutions, thereby reducing the financial strain upon the state-supported institutions.

NOW, THEREFORE

BE IT PROPOSED BY THE LEGISLATIVE COUNCIL OF THE STATE OF ARKANSAS:

SECTION 1. That the Commission on Coordination of Higher Educational Finance is respectfully requested to make a study, or to include within the scope of its current studies of the higher educational needs in Arkansas, of the feasibility of establishing a system of state-supported scholarships in this State, thereby enabling deserving Arkansas students to obtain educational opportunities in private supported institutions, as well as public institutions, in this State. Such study shall include a determination of the extent to which private institutions in this State could accept additional students, and the potential savings to the State of Arkansas of providing such educational opportunities at private institutions.

SECTION 2. Upon receipt of the report from the Commission on Coordination of Higher Educational Finance, the Legislative Council shall review the same and make recommendations in regard thereto to the 1969 regular session of the General Assembly.

Respectfully submitted,

s/Robert Harvey

**Robert Harvey, Senator
17th Senatorial District**

Filed: January 12, 1968

RESOLUTION NO. 1

WHEREAS, the University of Arkansas Board of Trustees and the Board of Trustees of Little Rock University, a private institution, have announced that agreements have been reached for merger of Little Rock University with the University of Arkansas, thereby establishing a University of Arkansas Unit at Little Rock for the offering of undergraduate and graduate training; and

WHEREAS, Little Rock is both the population and geographical center of this State, and the establishment of a campus of the University of Arkansas in Little Rock would make available higher educational opportunities at reasonable cost to thousands of our citizens who are now being deprived of higher educational opportunities; and

WHEREAS, it is immediately necessary that steps be taken to explore anticipated costs of the establishment of such Little Rock Campus of the University of Arkansas, and means of financing such costs, in order that the General Assembly may be fully advised thereof when the necessary legislation to accomplish such merger is proposed.

NOW, THEREFORE

BE IT RESOLVED BY THE LEGISLATIVE COUNCIL OF THE STATE OF ARKANSAS:

That the University of Arkansas Board of Trustees and the Board of Trustees of the Little Rock University are hereby commended for their efforts in studying and developing plans for the proposed merger of the Little Rock University with the University of Arkansas, thereby permitting the establishment of a Little Rock Campus of the University of Arkansas.

BE IT FURTHER RESOLVED that the Commission on Coordination of Higher Educational Finance is respectfully requested to study all aspects of such proposed merger, including anticipated enrollment and cost estimates, and to furnish to the Legislative Council at the earliest possible date a report of the immediate and long range estimates of the State funds that will be required to support such Little Rock Campus of the University of Arkansas if such merger is accomplished.

BE IT FURTHER RESOLVED that the Executive Department of this State is requested to study means of providing the additional financial support that will be required for the Little Rock Campus of the University of Arkansas if such merger is accomplished, in order that the General Assembly might be advised of proposed or anticipated means of financing such merger.

Respectfully submitted,

**s/Jack S. Oakes
Jack S. Oakes
Representative
16 Representative District**

Filed: July 13, 1967

BY: REPRESENTATIVE BRANDON
REPRESENTATIVE CARTER
REPRESENTATIVE COCKRILL
REPRESENTATIVE DISHONGH
REPRESENTATIVE HAYDON
REPRESENTATIVE HOLSTEAD
REPRESENTATIVE C. LEDBETTER
REPRESENTATIVE J. LEDBETTER
REPRESENTATIVE MEERS
REPRESENTATIVE MATTHEWS
REPRESENTATIVE RULE
REPRESENTATIVE WILLIAMS
REPRESENTATIVE WINDSOR

HOUSE CONCURRENT RESOLUTION

**RELATING TO A PROPOSED MERGER OF UNIVERSITY OF ARKANSAS AND
LITTLE ROCK UNIVERSITY.**

WHEREAS, the Board of Trustees of the University of Arkansas, after careful study, has proposed a merger between the University of Arkansas and Little Rock University whereby Little Rock University is to become the University of Arkansas at Little Rock; and

WHEREAS, the Boards of the University of Arkansas and Little Rock University have made an extensive study of a proposed merger of the two institutions, and have agreed on a plan of merger of the two institutions; and

WHEREAS, the needs of the people of Arkansas in the area of higher education are reaching crises proportions and there exists an additional need in the Central Arkansas area to coordinate the existing graduate programs of the University of Arkansas and in formulating plans for meeting the urgent undergraduate needs in said area; and

WHEREAS, the Commission on Coordination of Higher Educational Finance, at the direction of the Legislature, is currently engaged in a comprehensive study of our State's needs in the area of Higher Education, and at the request of the Legislative Council has made a preliminary report, which includes recommendations regarding the merger of the University of Arkansas and Little Rock University; and

AS ENGROSSED

WHEREAS, the regular session of the General Assembly scheduled to convene in January, 1969, must have available to it comprehensive plans, programs and budgets necessary to meet the needs of higher education; and

WHEREAS, such planning of programs and development of budgets must be undertaken in the period between the adjournment of this extraordinary session and the convening of the regular session in 1969; and

WHEREAS, the members of the General Assembly desire to have available to them prior to the next regular session all information concerning the estimated financial needs of the existing state-supported institutions of higher learning for the 1969-71 fiscal biennium, and, in addition thereto (a) estimates of the anticipated cost of the merging Little Rock University with the University of Arkansas, and (b) estimates of the anticipated cost, including acquisition and construction cost, for a new higher educational facility for Central Arkansas located south of the Arkansas River in a general area readily accessible to residents of Pulaski, Jefferson, Hot Spring, Saline and Garland Counties, in a general location to be recommended by the Commission on Coordination of Higher Educational Finance; and

WHEREAS, it is essential that the projected estimates and recommendations of the Commission on Coordination of Higher Educational Finance include projections of the most desirable means of meeting the higher educational needs of Central Arkansas in the future.

NOW, THEREFORE

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE FIRST EXTRAORDINARY SESSION OF THE SIXTY-SIXTH GENERAL ASSEMBLY OF THE STATE OF ARKANSAS, THE SENATE CONCURRING THEREIN:

That the Commission on Coordination of Higher Educational Finance be and is hereby requested to prepare estimates of the financial needs and requirements of each of the existing state-supported institutions of higher learning for each year of the 1969-71 fiscal biennium; and, in addition thereto, shall prepare estimates of plans, programs and budgets that would be required and desirable if (a) the General Assembly were to enact legislation providing for a merger of Little Rock University with the University of Arkansas, or (b) the General Assembly were to establish in the Central Arkansas area a new institution of higher learning with adequate acreage for future expansion, including estimates and recommendations for the minimum acreage requirements and construction costs for such facility. In preparing estimates of plans, programs and budgets for meeting the higher educational needs of Central Arkansas, the Commission shall specifically make projections which will reflect the most desirable long range plan for meeting such higher educational needs in Central Arkansas.

BE IT FURTHER RESOLVED that the request herein for the preparation of estimates for plans, programs and budgets for meeting the higher educational needs in Central Arkansas is for information purposes only, to be used in guiding the General Assembly, at the 1969 regular session and in the future, in its consideration of this problem, and shall not be deemed an endorsement or commitment by the General Assembly of any proposal for meeting the higher educational needs of Central Arkansas.

BE IT FURTHER RESOLVED that a copy of this Resolution shall be furnished by the Secretary of State to the Chairman and Director of the Commission on Coordination of Higher Educational Finance.

/s/ Turner
/s/ McKissack
/s/ Hopson
/s/ Nowotny
/s/ Taylor
/s/ Meacham
/s/ Murphy
/s/ Rule
/s/ Matthews
/s/ Hamilton
/s/ Windsor
/s/ Landers
/s/ Collins

/s/ Brandon
/s/ Holland
/s/ Foster
/s/ Day
/s/ Capps
/s/ Nicholson
/s/ Cockrill
/s/ Fields
/s/ Smithers
/s/ Williams
/s/ C. Ledbetter

/s/ Haydon
/s/ Dishongh
/s/ Sadler
/s/ Carter
/s/ J. Ledbetter
/s/ Meers
/s/ Holsted
/s/ J. Hayes
/s/ Davis
/s/ Henry
/s/ Sheid
/s/ Harris

HOUSE RESOLUTION

REQUESTING THE COMMISSION ON COORDINATION OF
HIGHER EDUCATIONAL FINANCE TO INCLUDE WITHIN
ITS STUDY OF THE LITTLE ROCK UNIVERSITY AND
UNIVERSITY OF ARKANSAS MERGER, THE FEASIBILITY
AND ADVANTAGES OF A UNIVERSITY SYSTEM FOR
HIGHER EDUCATION IN ARKANSAS

WHEREAS, it has been proposed that Little Rock University be merged with the University of Arkansas;
and

WHEREAS, the Commission on Coordination of Higher Educational Finance is currently making a
comprehensive study of the higher educational needs of this State; and

WHEREAS, it is important to the future development of the higher educational system of Arkansas that
the State adopt the most feasible and economic administrative structure for higher education;

NOW THEREFORE,

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE FIRST EXTRAORDINARY
SESSION OF THE SIXTY-SIXTH GENERAL ASSEMBLY OF
THE STATE OF ARKANSAS:

That the Commission on Coordination of Higher Educational Finance is respectfully requested to include
within its comprehensive study of the higher educational needs of this State, special attention to the **feasibility
and advantages of establishing a university system for higher education in Arkansas, yet retaining the Boards of
the separate institutions in the management and administration of the affairs of each such institution.**

BE IT FURTHER RESOLVED THAT a copy of this Resolution shall be furnished, by the Chief Clerk of
the House of Representatives, to the Chairman and Director of the Commission on Coordination of Higher
Educational Finance.

**H. C. R. No. 20
(By Ray Smith Jr.)**

CONCURRENT RESOLUTION

REQUESTING the Commission on Coordination of Higher Educational Finance to Make a Broad and Comprehensive Study of the Higher Educational Needs of This State;

WHEREAS, the Commission on Coordination of Higher Educational Finance has recently submitted a report to the Legislative Council concerning the Higher Educational needs of this State, and in said report emphasized the need for a broad and comprehensive study of the long-range higher educational needs of this State, and requested an appropriation to employ experts to assist in making such a study; and

WHEREAS, enrollment at the state-supported institutions of higher learning increased from 13,500 in 1956, to 31,000 in 1966, and it is anticipated that such enrollment will increase to 56,000 by 1976, and even further increases can be anticipated as Arkansas' economic level rises to the national level, as illustrated by the fact that last year only thirty-two per cent (32%) of Arkansas' college age population was attending institutions of higher learning while the national average of college age population attending colleges was forty-five per cent (45%); and

WHEREAS, these statistics leave no doubt that the State must prepare for a tremendous expansion of its higher educational facilities if the demands of the people of this State are to be met, and if the young people of this State are to be prepared for a competitive position in modern society, and if our adult citizens are to be retrained and upgraded to keep abreast of the rapid changes in our society and technology; and

WHEREAS, it is imperative that the State take immediate steps to make a broad and comprehensive study of its existing higher educational facilities, the anticipated needs for the future, and the best means of developing and coordinating the use and expansion thereof, in order to prevent costly duplication of facilities or services.

NOW, THEREFORE

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE SIXTY-SIXTH GENERAL ASSEMBLY OF THE STATE OF ARKANSAS, THE SENATE CONCURRING THEREIN:

THAT The Commission on Higher Educational Finance is respectfully requested, in connection with its study of the long-range higher educational needs of this State, to give special emphasis in said study to a determination of the following:

- (1) Whether the higher educational system of this State might be better planned, organized, programmed, and financed by the establishment of a State University Stytem under the direction of a Board of Regents with each institution to retain its existing Board, but to be a part of a university system. The report of the Commission shall list the various advantages and disadvantages of a State University System with a Board of Regents.**
- (2) The anticipated growth of student enrollment at existing state supported institutions of higher learning, and the various private institutions of higher learning in the State, for the purpose of determining the areas of the State in which higher educational needs are not being met, including the determination of the need for an additional state supported institution of higher learning in central Arkansas.**
- (3) A comprehensive study of the existing facilities at the various state supported institutions of higher learning and a determination of new facilities which will be required for the expansion of existing institutions, or new institutions that may be needed, for the purpose of determining whether the**

State can construct the same from existing revenues, including the use of federal funds available therefor, or whether, in the foreseeable future, a bond issue will be required to provide the necessary State funds to meet the needs for facilities at the various State institutions of higher learning.

- (4) The need of the State for a system of community colleges and recommendations for the proper role to be played by such community junior colleges in relationship to four-year state supported institutions of higher learning.
- (5) A study and review of the existing programs and services available at the state supported institutions of higher learning, including a determination of needed expansion of programs and services by existing institutions, through community junior colleges, or through new institutions of higher learning, for the purpose of developing recommendations whereby proper planning and controls may be exercised over the programs and activities at each of the respective institutions, in order that maximum utilization and economies may be made of facilities and resources without unnecessary and costly duplication of services and facilities.

The Commission is requested to study such other aspects of the higher educational needs of this State as the Commission may determine are necessary.

BE IT FURTHER RESOLVED that the Commission on Coordination of Higher Educational Finance is requested to conclude its study and recommendations at the earliest possible date in order that the General Assembly and the Governor of this State may review the same in advance of the next regular session of the General Assembly, or at an earlier date in the event a Special Session may be called to deal with this and similar problems.

APPENDIX II

LIST OF CONSULTANTS AND COMMITTEE MEMBERS

COORDINATING COMMITTEE

Mr. Shelby Breedlove, President
Westark Community Junior College
Grand Avenue and Waldron Road
Fort Smith, Arkansas

Dr. Barton A. Westerlund, Director
Industrial Research & Extension Center
1201 McAlmont
Little Rock, Arkansas

Mr. Robert Moore
Dean of Students
Arkansas State University
Jonesboro, Arkansas

Dr. John E. Kane
Vice President for Business
University of Arkansas
Fayetteville, Arkansas

Dr. Joe T. Clark
Dean of Instruction
Henderson State College
Arkadelphia, Arkansas

Dr. Hugh Mills, Director
General Extension Division
University of Arkansas
Fayetteville, Arkansas

Dr. A. E. Burdick
Dean of Instruction
State College of Arkansas
Conway, Arkansas

PRESIDENT'S COMMITTEE

Dr. Claude H. Babin, President
Arkansas A & M College
Monticello, Arkansas 71633

Dr. Lawrence Davis, President
Arkansas A M & N College
Pine Bluff, Arkansas 71601

Dr. George Pratt, President
Arkansas Polytechnic College
Russellville, Arkansas 72802

Dr. Carl Reng, President
Arkansas State University
Jonesboro, Arkansas 72467

Dr. Silas Snow, President
State College of Arkansas
Conway, Arkansas 72032

Dr. David W. Mullins, President
University of Arkansas
Fayetteville, Arkansas 72701

Dr. Imon E. Bruce, President
Southern State College
Magnolia, Arkansas 71753

Dr. M. H. Russell, President
Henderson State College
Arkadelphia, Arkansas 71923

Dr. Don Davis, President
College of the Ozarks
Clarksville, Arkansas 72830

Dr. Marshall T. Steele, President
Hendrix College
Conway, Arkansas 72032

Dr. Ernest Dixon, Jr., President
Philander Smith College
1116 State Street
Little Rock, Arkansas 72203

Mr. Shelby Breedlove, President
Westark Community Junior College
Grand Avenue and Waldron Road
Fort Smith, Arkansas 72904

Dr. John Easley, President
Phillips County Community Junior College
Helena, Arkansas 72342

249/250/251

a. Committee on Junior College and Vocational-Technical Programs

***Mr. Shebly Breedlove, President**
Westark Community Junior College
Grand Avenue and Waldron Road
Fort Smith, Arkansas 72904

Mr. J. J. Hogue
Arkansas A & M College
Monticello, Arkansas 71633

Mr. Ronald L. Griffith
Phillips County Community Junior College
Helena, Arkansas 72342

Dr. J. R. Howe
University of Arkansas
Fayetteville, Arkansas 72701

Mr. Jake Ruppert
Vocational Division
State Department of Education
Little Rock, Arkansas

Dr. M. Vance Sales
Arkansas State University
Jonesboro, Arkansas 72467

Dr. D. Jack Nicholas, Executive Vice President
Southern Baptist College
Walnut Ridge, Arkansas 72476

Mr. Norman Kelly
Arkansas Baptist College
1600 High Street
Little Rock, Arkansas

b. Committee on Four and Five-Year Undergraduate Programs

***Dr. Joe T. Clark**
Dean of Instruction
Henderson State College
Arkadelphia, Arkansas 71923

Mr. Roy Weedon
Arkansas Polytechnic College
Russellville, Arkansas 72801

Dr. Robert Morrow
State College of Arkansas
Conway, Arkansas 72032

Dr. George L. Sixby, Chairman
Division of Humanities
Southern State College
Magnolia, Arkansas 71753

Dr. J. B. Johnson
Arkansas A M & N College
Pine Bluff, Arkansas 71601

Dr. N. D. Hazelbaker
Vice President for Instruction
Arkansas State University
Jonesboro, Arkansas 72467

Dean R. L. Kirchman
Arkansas A & M College
Monticello, Arkansas 71633

Dr. Roy Allen
College of Education
University of Arkansas
Fayetteville, Arkansas 72701

Dr. Lloyd Bowie
Professor of Business Administration
Little Rock University
Little Rock, Arkansas

Mr. Wayne S. Smith
Ouachita Baptist University
Arkadelphia, Arkansas 71924

c. Committee on Graduate - Professional Programs and Research

Dr. Virgil W. Adkisson, Dean
The Graduate School
University of Arkansas
Fayetteville, Arkansas 72701

Dr. Charles Jackson
Dir. of Research and Federal Programs
Southern State College
Magnolia, Arkansas

Dr. Melvyn N. Freed
Director of Institutional Research
Arkansas State University
Jonesboro, Arkansas 72467

Dr. Howard Quittner, Director
Clinical Laboratories
Medical Center
4301 West Markham
Little Rock, Arkansas

Dr. B. A. Lewis, Dean of
Graduate Program
State College of Arkansas
Conway, Arkansas 72032

Professor Ralph Barnhart, Dean
School of Law
University of Arkansas
Fayetteville, Arkansas 72701

Dr. Waldo A. Dahlstedt
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APPENDIX III

STATISTICAL SUMMARIES

TABLE I

TOTAL POPULATION AND PERCENT DISTRIBUTION, BY AGE, COLOR AND SEX, ARKANSAS, ACTUAL 1960 AND PROJECTED RANGE, 1980

Age Group	1960 Population				1980 Series A				1980 Series B			
	Male		Female		Male		Female		Male		Female	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Classes												
0-4	98,330	11.2	96,113	10.6	125,100	13.1	120,000	12.0	168,800	13.7	161,900	12.7
5-9	95,496	10.9	92,617	10.2	115,100	12.0	110,300	11.0	152,200	12.4	146,000	11.4
10-14	95,466	10.9	91,637	10.1	102,300	10.7	97,900	9.7	131,800	10.7	126,500	9.9
15-19	76,407	8.7	74,748	8.2	85,600	9.0	82,300	8.2	110,000	9.0	105,800	8.3
20-24	48,630	5.5	51,222	5.6	70,900	7.4	70,300	7.0	96,400	7.8	95,100	7.5
25-29	43,632	5.0	48,015	5.3	65,300	6.8	65,100	6.5	93,100	7.6	91,700	7.2
30-34	45,935	5.2	52,000	5.7	64,400	6.7	64,400	6.4	92,500	7.5	90,400	7.1
35-39	49,148	5.6	54,880	6.0	53,300	5.6	54,400	5.4	73,500	6.0	73,400	5.8
40-44	50,168	5.7	54,554	6.0	36,500	3.8	39,900	4.0	46,500	3.8	49,900	3.9
45-49	52,026	5.9	54,704	6.0	34,200	3.6	39,200	3.9	40,900	3.3	46,200	3.6
50-54	48,919	5.6	51,632	5.7	36,100	3.8	43,100	4.3	41,600	3.4	49,000	3.8
55-59	44,098	5.0	47,142	5.2	37,300	3.9	45,200	4.5	41,900	3.4	50,300	3.9
60-64	35,807	4.1	38,574	4.3	35,600	3.7	43,800	4.4	39,000	3.2	47,900	3.8
65-69	35,627	4.1	37,092	4.1	32,900	3.4	41,600	4.1	35,300	2.9	44,900	3.5
70-74	27,378	3.1	27,424	3.0	26,000	2.7	34,800	3.5	27,500	2.2	27,800	3.0
75 and over	31,920	3.6	34,931	3.9	36,300	3.8	51,500	5.1	38,600	3.1	59,100	4.6
Total	878,987	100.0	907,285	100.0	956,900	100.0	1,003,800	100.0	1,229,600	100.0	1,275,900	100.0
White												
0-4	69,277	10.0	66,822	9.5	86,700	11.8	82,400	10.8	112,700	12.3	107,100	11.4
5-9	68,384	9.9	65,871	9.3	82,300	11.2	78,300	10.2	105,300	11.5	100,100	10.6
10-14	72,073	10.4	68,708	9.7	75,700	10.3	72,000	9.4	94,900	10.4	90,400	9.6
15-19	58,938	8.5	57,456	8.2	64,900	8.8	62,100	8.1	81,600	8.9	77,900	8.3
20-24	39,348	5.7	40,685	5.8	51,200	7.0	50,200	6.6	67,900	7.4	66,100	7.0
25-29	36,374	5.3	38,997	5.5	48,300	6.6	47,800	6.3	66,700	7.3	65,200	6.9
30-34	38,883	5.6	42,313	6.0	50,500	6.9	49,900	6.5	69,800	7.7	67,800	7.2
35-39	41,809	6.1	45,089	6.4	42,800	5.8	43,200	5.7	56,700	6.2	56,400	6.0
40-44	42,182	6.1	44,539	6.3	30,400	4.1	32,500	4.3	37,600	4.1	39,600	4.2
45-49	43,218	6.3	44,064	6.3	29,100	4.0	32,400	4.2	34,100	3.7	37,500	4.0
50-54	40,257	5.8	41,807	5.9	31,000	4.2	35,600	4.7	35,200	3.9	39,900	4.2
55-59	35,583	5.2	37,598	5.3	32,100	4.4	37,700	4.9	35,600	3.9	41,300	4.4

(more)

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TABLE I - (Continued.)
TOTAL POPULATION AND PERCENT DISTRIBUTION, BY AGE, COLOR AND SEX, ARKANSAS, ACTUAL 1960 AND PROJECTED RANGE, 1980

Age Group	1960 Population				1980 Series A				1980 Series B			
	Male		Female		Male		Female		Male		Female	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White - continued												
60-64	28,963	4.2	31,044	4.4	30,300	4.1	36,300	4.7	32,800	3.6	39,100	4.2
65-69	28,112	4.1	29,161	4.1	27,700	3.8	33,900	4.4	29,300	3.2	36,200	3.8
70-74	21,939	3.2	22,181	3.1	21,700	3.0	28,400	3.7	22,600	2.5	30,600	3.2
75 and over	25,422	3.7	28,606	4.1	29,700	4.0	41,700	5.5	31,000	3.4	47,300	5.0
Total	690,762	100.0	704,941	100.0	734,400	100.0	764,400	100.0	913,800	100.0	942,500	100.0
Nonwhite												
0-4	29,053	15.4	29,291	14.5	38,400	17.3	37,600	15.7	56,100	17.8	54,800	16.4
5-9	27,112	14.4	26,746	13.2	32,800	14.7	32,000	13.4	46,900	14.8	45,900	13.8
10-14	23,393	12.4	22,929	11.3	26,600	12.0	25,900	10.8	36,900	11.7	36,100	10.8
15-19	17,469	9.3	17,292	8.5	20,700	9.3	20,200	8.4	28,400	9.0	27,900	8.4
20-24	9,282	4.9	10,537	5.2	19,700	8.9	20,100	8.4	28,500	9.0	29,000	8.7
25-29	7,258	3.9	9,018	4.5	17,000	7.6	17,300	7.2	26,400	8.4	26,500	8.0
30-34	7,052	3.7	9,687	4.8	13,900	6.3	14,500	6.1	22,700	7.2	22,600	6.8
35-39	7,339	3.9	9,791	4.8	10,500	4.7	11,200	4.7	16,800	5.3	17,000	5.1
40-44	7,986	4.2	10,015	4.9	6,100	2.7	7,400	3.1	8,900	2.8	10,300	3.1
45-49	8,808	4.7	10,640	5.3	5,100	2.3	6,800	2.9	6,800	2.2	8,700	2.6
50-54	8,662	4.6	9,825	4.9	5,100	2.3	7,500	3.1	6,400	2.0	9,100	2.7
55-59	8,515	4.5	9,544	4.7	5,200	2.3	7,500	3.1	6,300	2.0	9,000	2.7
60-64	6,844	3.6	7,530	3.7	5,300	2.4	7,500	3.1	6,200	2.0	8,800	2.6
65-69	7,515	4.0	7,931	3.9	5,200	2.3	7,700	3.2	6,000	1.9	8,700	2.6
70-74	5,439	2.9	5,243	2.6	4,300	1.9	6,400	2.7	4,900	1.5	7,200	2.2
75 and over	6,498	3.5	6,325	3.1	6,600	3.0	9,800	4.1	7,600	2.4	11,800	3.5
Total	188,225	100.0	202,344	100.0	222,500	100.0	239,400	100.0	315,800	100.0	333,400	100.0

Sources: U. S. Department of Commerce, Bureau of the Census, Census of Population: 1960: General Population Characteristics, Arkansas, PC(1) 5B (Washington: Government Printing Office), Table 17, pp. 36-37; and projected population range, 1980 computed by Industrial Research and Extension Center, College of Business Administration, University of Arkansas.

TABLE IV

EMPLOYMENT BY INDUSTRY, ARKANSAS AND THE UNITED STATES: 1940-1960

Industry	Arkansas		United States	
	1940	1950	1940	1950
Agriculture, forestry, and fisheries	302,265	217,514	8,496,147	7,033,591
Nonagricultural				
Mining	5,902	6,773	913,600	930,968
Construction	17,371	35,291	2,075,274	3,457,980
Manufacturing	57,809	85,728	10,567,842	14,685,482
Durable goods	40,810	50,702	5,116,483	7,764,478
Lumber and furniture and wood products	36,160	38,925	903,202	1,196,116
Lumber and wood products	...	35,650	...	866,612
(except furniture)	...	3,275	...	329,504
Furniture and fixtures	...	1,706	...	1,184,975
Primary metal industry	1,121	1,130	1,495,350	847,209
Fabricated metal industry	763	2,490	724,166	1,253,533
Machinery, except electrical	73	1,176	370,184	861,307
Electrical machinery	325	649	876,303	1,343,157
Transportation equipment	2,368	4,626	747,278	1,078,181
Other durable goods	...	2,963	...	470,340
Stone, clay and glass products	...	754	...	201,773
Instruments and related products	...	909	...	406,068
Miscellaneous	...	34,470	5,451,359	6,802,879
Nondurable goods	16,999	10,698	1,091,728	1,481,280
Food and kindred products	7,771	1,906	1,168,974	1,227,525
Textile mill products	852	3,184	785,564	1,066,511
Apparel and finished products	1,522	3,816	636,277	862,936
Printing, publishing, and allied products	2,601	4,703	426,145	637,349
Chemicals and allied products	272	10,163	1,342,671	1,527,278
Other nondurable goods	3,981	44	...	94,140
Tobacco products	...	4,430	...	464,490
Paper and allied products	...	2,251	...	279,203
Petroleum and coal products	...	285	...	301,531
Rubber and miscellaneous plastic products	...	3,153	...	387,914
Leather and leather products	...	556	...	118,125
Not specified	60,530
Transportation, communications and public utilities	24,876	35,853	3,107,568	4,449,861
Wholesale and retail trade	64,358	97,347	7,545,918	10,507,331
Finance, insurance and real estate	7,129	10,564	1,472,397	1,919,610
Services	69,577	78,160	7,353,992	8,547,207
Government	25,483	36,898	2,627,509	4,059,908
Industry not reported	8,174	11,916	727,836	843,335
Total	582,944	616,044	44,888,083	56,435,273
		565,491		64,639,256

Sources: U. S. Bureau of the Census, 1950 Census of Population, Vol. II, Part 1, p. 1-285; and 1960 Census of Population, Vol. I, Part 5, pp. 5-155, 5-358 and Final Report PG(1) - 1D, pp. 1-565 and 1-566.

TABLE V

PERCENT DISTRIBUTION OF EMPLOYMENT BY INDUSTRY, ARKANSAS AND THE UNITED STATES: 1940-1960

Industry	Arkansas		United States	
	1940	1950	1940	1950
Agriculture, forestry, and fisheries	51.9	35.3	18.9	12.4
Nonagricultural				
Mining	1.0	1.1	2.0	1.7
Construction	3.0	5.7	4.6	6.1
Manufacturing	9.9	13.9	23.5	26.0
Durable goods	7.0	8.2	11.4	13.7
Lumber and furniture and wood products	6.2	6.3	2.0	2.1
Lumber and wood products				
(except furniture)	...	5.8	...	1.5
Furniture and fixtures	...	0.5	...	0.6
Primary metal industry	0.2	0.3	3.3	2.1
Fabricated metal industry		0.2	1.6	1.5
Machinery, except electrical	0.1	0.4	0.8	2.2
Electrical machinery	(a)	0.2	2.0	1.5
Transportation equipment	0.1	0.1	1.7	2.4
Other durable goods	0.4	0.7	...	1.9
Stone, clay and glass products	...	0.5	...	0.8
Instruments and related products	...	0.1	...	0.4
Miscellaneous	...	0.1	...	0.7
Nondurable goods	2.9	5.6	12.1	12.1
Food and kindred products	1.3	1.7	2.4	2.6
Textile mill products	0.1	0.3	2.6	2.3
Apparel and finished products	0.3	0.5	1.8	1.9
Printing, publishing, and allied products	0.4	0.6	1.4	1.5
Chemicals and allied products	0.1	0.8	0.9	1.1
Other nondurable goods	0.7	1.7	3.0	2.7
Tobacco products	...	(a)	...	0.2
Paper and allied products	...	0.7	...	0.8
Petroleum and coal products	...	0.4	...	0.5
Rubber and miscellaneous plastic products	...	0.1	...	0.5
Leather and leather products	...	0.5	...	0.7
Not specified	...	0.1	...	0.2
Transportation, communications and public utilities	4.3	5.8	6.9	7.9
Wholesale and retail trade	11.0	15.8	16.8	18.7
Finance, insurance and real estate	1.2	1.7	3.3	3.4
Services	11.9	12.7	16.4	15.1
Government	4.4	6.0	6.0	7.2
Industry not reported	1.4	2.0	1.6	1.5
Total	100.0	100.0	100.0	100.0
				6.7
				1.0
				5.9
				27.1
				15.2
				1.7
				1.1
				0.6
				1.9
				2.0
				2.4
				2.3
				2.8
				2.1
				0.9
				0.6
				0.6
				11.8
				2.8
				1.5
				1.8
				1.8
				1.3
				2.6
				0.1
				0.9
				0.4
				0.6
				0.6
				0.1
				7.0
				18.2
				4.2
				17.0
				8.9
				4.0
				100.0

^aLess than 0.1 percent.

Source: Calculated from the data shown in Table II of this study.

TABLE VII
PERCENT DISTRIBUTION OF EMPLOYMENT BY OCCUPATION, ARKANSAS AND THE UNITED STATES: 1940-1960

Occupation	Arkansas			United States		
	1940	1950	1960	1940	1950	1960
Professional, technical, and kindred workers	4.9	6.1	8.2	8.0	8.7	11.2
Managerial	6.0	7.7	8.9	8.1	9.0	8.4
Clerical	3.9	6.5	9.0	9.7	12.3	14.4
Sales workers	4.2	5.7	6.6	6.8	6.9	7.2
Craftsmen, foremen, and kindred workers	5.5	9.4	11.3	11.5	13.9	13.5
Operatives	7.3	12.8	17.1	17.9	19.8	18.4
Laborers (nonfarm)	7.5	7.5	6.5	7.0	6.1	4.8
Service workers ^a	8.9	8.5	12.3	11.7	10.1	11.1
Farmers, farm managers, and farm laborers	51.1	34.1	16.3	18.4	11.9	6.1
Occupation not reported	0.7	1.7	3.8	0.9	1.3	4.9
Total employed	100.0	100.0	100.0	100.0	100.0	100.0

^a Includes private household help.

Source: Calculated from the data shown in Table IV of this study.

TABLE VIII

EMPLOYMENT BY INDUSTRY, ARKANSAS: 1960 AND PROJECTED 1980

Industry	Employment		Percent Distribution	
	Actual, 1960	Projected, 1980 Series I	Actual, 1960	Projected, 1980 Series I
Agriculture, forestry and fisheries	100,200	58,700	17.7	8.0
Nonagricultural	450,388	651,070	79.7	88.3
Mining	4,848	3,530	0.9	0.5
Construction	36,464	42,860	6.4	5.8
Manufacturing	113,513	202,770	20.1	27.5
Durable goods	60,114	112,850	10.6	15.3
Lumber and furniture and wood products	36,246	34,510	6.4	4.7
Lumber and wood products				
(except furniture)	29,690	20,960	5.2	2.9
Furniture and fixtures	6,556	13,550	1.2	1.8
Primary metal industry	2,473	2,060	0.4	0.3
Fabricated metal industry	3,304	12,750	0.6	1.7
Machinery, except electrical	2,850	12,350	0.5	1.7
Electrical machinery	4,453	28,900	0.8	3.9
Transportation equipment	2,196	3,140	0.4	0.4
Other durable goods	8,592	19,140	1.5	2.6
Stone, clay and glass products	4,002	5,820	0.7	0.8
Instruments and related products	1,835	1,900	0.3	0.3
Miscellaneous manufacturing industries ^a	2,755	11,420	0.5	1.5
Nondurable goods	53,399	89,920	9.5	12.2
Food and kindred products	17,637	25,800	3.1	3.5
Textile mill products	2,156	2,830	0.4	0.4
Apparel and finished products	8,299	19,190	1.5	2.6
Printing, publishing, and allied products	5,340	7,640	1.0	1.0
Chemicals and allied products	5,244	6,170	0.9	0.9
Other nondurable goods	14,723	28,290	2.6	3.8
Tobacco products	62		(b)	
Paper and allied products	7,095	14,000	1.3	1.9
Petroleum and coal products	1,625	1,620	0.3	0.3
Rubber and miscellaneous plastic products	1,309	4,310	0.2	0.6
Leather and leather products	4,632	8,360	0.8	1.1

(more)

TABLE VIII - (Continued.)
EMPLOYMENT BY INDUSTRY, ARKANSAS: 1960 AND PROJECTED 1980

Industry	Employment		Percent Distribution	
	Actual, 1960	Projected, 1980 Series I Series II	Actual, 1960	Projected, 1980 Series I Series II
Transportation, communications, and public utilities	34,880	32,510	6.2	4.4
Wholesale and retail trade	103,820	135,700	18.4	18.4
Finance, insurance and real estate Services	15,266	32,450	2.7	4.4
Government	98,362	136,400	17.4	18.5
Industry not reported	43,235	64,850	7.6	8.8
	14,903	27,060	2.6	3.7
Total	565,491	736,830	100.0	100.0
		811,870		100.0

^aThe durable goods miscellaneous manufacturing industry category includes 307 workers whose industry category was not reported. In Tables II and III the workers are shown in the separate category, "not specified."

^bLess than 0.1 percent.

Source: Arkansas State Planning Commission, State Plan Inventory, Section 3-A, pp. 6, 7, 8, and 9.

TABLE XXV

NUMBER OF BACCALAUREATE DEGREES GRANTED BY PUBLIC SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS
1962-1963 - 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
LIBERAL ARTS										
Agri. Econ. & Rural Soc.								22		22
Anthro. & Soc.								47		47
Chinese								1		1
Chinese								1		1
Classics										
Economics	13	20	10	21	62	14	18	43		201
English	149	77	52	206	122	28	116	325		1,075
English						5				26
Foreign Lang.	21									
French		4		7	2		6	28		47
French							7	8		15
Geography								16		17
German				1						
German										
Government			40	21	4	1		55		121
Government										
History	78	12	49	15	18	51	33	153		409
History										44
Hist. & Pol. Sci.			44							
Hist. & Pol. Sci.				47				44		91
Journalism										9
Lang. & Lit.			9							
Lang. & Lit.								2		2
Latin										
Latin								25		29
Philosophy		2		2						
Philosophy					83	8	17	131		257
Psychology		18								

(more)

TABLE XXV - (Continued)
NUMBER OF BACCALAUREATE DEGREES GRANTED, 1962-1963 - 1966-1967

Program and Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
Romance Lang.								9		9
Soc. Psych.						5				5
Soc. Sci.	76	14	185	91			121	80		567
Soc. Welfare								42		42
Sociology	119	34	54	19	14	27	7			274
Spanish			5	11		12	31			59
Sp. & Dra. Art	16	6	2	27	7	31	89			178
Total	472	119	272	566	439	133	388	1,159		3,548
SCIENCE										
Biology	185	32	69	195	75	26	92	5		679
Bot. & Bact.								38		38
Chemistry	99	57	25	49	34	7	11	19		301
Gen. Sci.	3	15	25	4	17		14	53		131
Geology			11			6		25		42
Math.	119	35	90	166	114	38	191	197		950
Natural Sci.								64		64
Phys. Sci.	10						12	3		25
Physics		3	11	7	16		14	41		92
Zoology				1				81		82
Total	416	142	231	422	256	77	334	526		2,404

(more)

TABLE XXV - (Continued.)
NUMBER OF BACCALAUREATE DEGREES GRANTED, 1962-1963 - 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
FINE ARTS										
Art	28		19	36	32		31	27		173
Music	65	14	43	58	74	11	22	65		352
Organ								3		3
Piano								2		2
Theater				4						4
Voice								2		2
Total	93	14	62	98	106	11	53	99		536
EDUCATION										
Dist. Educ.								7		7
Elementary	510	176	135	844	351	212	474	534		3,236
Elem. Edu. - Ment. Retarded				36						36
Except. Children							9			9
Indust. Educ.							32	17		49
Lib. Sci-Edu.								5		5
Phys. Educ. & Health	123	138	103	169	182	67	167	154		1,103
Rec. & Park Adm.			11						11	11
Secondary	4		21			128		3		156
Spec. Educ.								32		32
Voc. Arts (Teaching)	58									58
Voc. Educ.								3		3
Total	695	314	270	1,049	533	407	682	755		4,705

(more)

TABLE XXV - (Continued.)
NUMBER OF BACCALAUREATE DEGREES GRANTED, 1962-1963 - 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
BUSINESS ADMINISTRATION										
Accounting		45	88	122		62	4	252		573
Bank. & Finan.								90		90
Bus. Admin.	68	6		305		205	2			586
Bus. Educ.	117	40	26	159	48		93	80		563
Finance								50		50
Gen. Bus.	4	114	151				74	302		645
Indust. Mgt.		29				9		56		94
Indust. Relations						4				4
Ins. & Real Estate								46		46
Management								139		139
Marketing								366		366
Office Mgt.		4				10				14
Personnel Admin. & Indust. Relations								26		26
Pub. Admin.								3		3
Sec. Practice		2								2
Transportation								30		30
Total	189	240	265	586	48	290	173	1,440		3,231

(more)

TABLE XXV - (Continued.)
NUMBER OF BACCALAUREATE DEGREES GRANTED, 1962-1963 - 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
HOME ECONOMICS										
Foundation								72		72
Home Ec. Educ.	99		9		75		142	97		422
Instit. Dietetics	43									43
Total	142		9		75		142	169		537
AGRICULTURE										
Agri. Bus.		13				4		2		19
Agri. Econ.	2			1						3
Agri. Econ. & Bus.				25						25
Agri. Educ.	32			104				36		172
Agri. Engr.				23				14		37
Agriculture								3		3
Agronomy	14			29				5		48
Animal Husbandry	9			57				35		101
Animal Indust.								1		1
Animal Nutrition								27		27
Animal Science								14		14
Crops								26		26
Dairy Husbandry								8		8
Dairy Science								3		3
Entomology								19		19

(more)

TABLE XXV - (Continued.)
NUMBER OF BACCALAUREATE DEGREES GRANTED, 1962-1963 - 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
AGRICULTURE - continued										
Farm Mgt.								1		1
Gen. Agri.				27				28		55
Horticulture	14			5				4		23
Poultry Husbandry	1							13		14
Poultry Nutrition								2		2
Poultry Science								6		6
Soil								11		11
Total	72	13	0	271	0	4	0	258		618
ENGINEERING										
Chemical								106		106
Civil								233		233
Electrical								280		280
Industrial								107		107
Mechanical								158		158
Total								884		884
INDUSTRIAL EDUCATION										
Indust. Arts		18								18
Indust. Tech.		21								21
Total		39								39

(more)

TABLE XXV - (Continued.)
NUMBER OF BACCALAUREATE DEGREES GRANTED, 1962-1963 - 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
VOCATIONAL TRAINING										
Voc. Arts (Non-teach.)	3									3
Total	3									3
MEDICINE, NURSING, PHARMACY										
Med. Tech.			7			7			54	68
Medicine									188	188
Nursing									80	80
Pharmacy									165	165
Total	7					7		247	487	501
LAW										247
Total								158		158
ARCHITECTURE										
Total								158		111
FORESTRY										
Total			111							111
RADIO, JOURNALISM, PRINTING										
Printing				13						13
Radio-Journ.				19						19
Total				32						32
GRAND TOTAL	2,082	992	1,116	3,024	1,457	929	1,772	5,695	487	17,554

TABLE XXVI

BACCALAUREATE DEGREE PROGRAMS OFFERED BY PUBLIC SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS
1966-1967

Program and Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
LIBERAL ARTS										
Agri. Eco. & Rural Soc.								X		1
Anthro. & Soc.								X		1
Chinese								X		1
Classics								X		1
Economics	X	X	X	X	X	X	X	X		8
English	X	X	X	X	X	X	X	X		8
Foreign Lang.	X					X				2
French		X		X	X		X	X		5
Geography							X	X		2
German				X				X		2
Government			X	X	X	X		X		5
History	X	X	X	X	X	X	X	X		8
Hist. & Pol. Sci.			X							1
Journalism				X			X	X		3
Lang. & Lit.			X							1
Latin								X		1
Philosophy			X	X				X		3
Psychology			X		X	X	X	X		5
Romance Lang.								X		1

(more)

TABLE XXVI - (Continued.)
BACCALAUREATE DEGREE PROGRAMS, 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
LIBERAL ARTS - continued -										
Soc. Sci.	X			X	X		X	X		5
Soc. Welfare								X		1
Sociology	X		X		X	X	X	X		6
Spanish				X	X		X	X		4
Sp. & Dra. Art	X	X		X	X	X	X	X		7
Total	7	5	9	11	10	8	11	21		82
SCIENCE										
Biology	X	X	X	X	X	X	X	X		8
Bot. & Bact.								X		1
Chemistry	X	X	X	X	X	X	X	X		8
Gen. Sci.		X	X	X	X		X	X		5
Geology			X			X		X		3
Math.	X	X	X	X	X	X	X	X		8
Natural Sci.								X		1
Physical Sci.	X						X	X		3
Physics		X	X	X	X		X	X		6
Zoology				X				X		2
Total	4	5	6	5	5	4	6	10		45

(more)

TABLE XXVI - (Continued.)
BACCALAUREATE DEGREE PROGRAMS, 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
FINE ARTS										
Art	X		X	X	X		X	X		6
Music	X		X	X	X	X	X	X		7
Organ								X		1
Piano								X		1
Theater				X						1
Voice								X		1
Total	2	0	2	3	2	1	2	5		17
EDUCATION										
Basic Sci-Educ.								X		1
Distr. Educ.								X		1
Elementary	X	X	X	X	X	X	X	X		8
Elem. Educ.- Ment. Retarded				X						1
Elem. Educ.- Sp. Path.				X						1
Except. Children							X			1
Indust. Educ.							X	X		2
Lib. Sci-Educ.								X		1
Phys. Educ. & Health	X	X	X	X	X	X	X	X		8

(more)

TABLE XXVI - (Continued.)
BACCALAUREATE DEGREE PROGRAMS, 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
EDUCATION - continued -										
Rec. & Park Adm.			X							1
Secondary		X				X		X		3
Spec. Educ.								X		1
Voc. Educ.								X		1
Voc. Arts. (teaching)	X									1
Total	3	3	3	4	2	3	4	9		31
BUSINESS ADMINISTRATION										
Accounting		X	X	X	X	X	X	X		7
Agri. Bus.		X						X		2
Banking & Finan.								X		1
Bus. Admin.	X	X		X		X	X			5
Bus. Educ.	X	X	X	X	X	X	X	X		8
Finance					X			X		2
Gen. Bus.	X	X	X		X		X	X		6
Indust. Mgt.		X						X		2
Ins. & Real Estate								X		1
Management								X		1
Mgt. & Marketing					X					1

(more)

TABLE XXVI - (Continued.)
BACCALAUREATE DEGREE PROGRAMS, 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
BUSINESS ADMINISTRATION - continued -										
Marketing								X		1
Office Mgt.	X					X				2
Personnel Admin. & Indust. Relations								X		1
Public Admin.								X		1
Sec. Practice	X									1
Transportation								X		1
Total	3	8	3	3	5	4	4		13	43
VOCATIONAL TRAINING										
Voc. Arts (Non-teaching)	X									1
Total	1									1
MEDICINE, NURSING, PHARMACY										
Medical Tech.			X			X			X	3
Medicine									X	1
Nursing							X		X	2
Pharmacy									X	1
Total	1		1			1	1		4	7
HOME ECONOMICS										
Foundation								X		1
Home Ec. Educ.					X			X		2
Inst. Dietetics	X									1
Total	1				1				2	4

(more)

TABLE XXVI - (Continued.)
BACCALAUREATE DEGREE PROGRAMS, 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
AGRICULTURE										
Agri. Econ.	X									1
Agri. Econ. & Bus.				X						1
Agri. Educ.	X			X				X		3
Agri. Engr.				X				X		2
Agriculture								X		1
Agonomy	X			X				X		3
Animal Husbandry	X			X				X		3
Animal Industry								X		1
Animal Nutrition								X		1
Animal Science								X		1
Crops								X		1
Dairy Husbandry								X		1
Dairy Science								X		1
Entomology								X		1
Farm Mgt.								X		1
Gen. Agri.				X				X		2
Horticulture	X			X				X		3

(more)

TABLE XXVI - (Continued.)
BACCALAUREATE DEGREE PROGRAMS, 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
AGRICULTURE - continued -										
Nutrition								X		1
Poultry Husbandry	X							X		2
Poultry Nutrition								X		1
Poultry Science								X		1
Ruminant Nutrition								X		1
Soil								X		1
Total	6			7				21		34
LAW										
Law								X		1
Total								1		1
ARCHITECTURE										
Architecture								X		1
Total								1		1
RADIO, JOURN., PRGTG.										
Printing				X						1
Radio-Journ.				X						1
Total				2						2
FORESTRY										
Forestry		X								1
Total		1								1

(more)

TABLE XXVI - (Continued.)
BACCALAUREATE DEGREE PROGRAMS, 1966-1967

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
ENGINEERING										
Chemical								X		1
Civil								X		1
Electrical								X		1
Industrial								X		1
Mechanical								X		1
Total								5		5
INDUSTRIAL EDUCATION										
Indust. Arts										1
Indust. Tech.										1
Total										2
GRAND TOTAL	27	24	24	35	25	21	28	88	4	276

TABLE XXVIII

PROJECTED BACCALAUREATE DEGREE PROGRAMS IN PUBLIC SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS
1968-1981

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
LIBERAL ARTS										
Anthro.							X			1
Commun. Plan.				X						1
Economics		X								1
Foreign Lang.			X							1
French						X				1
Geography				X		X				2
German							X			1
Government							X			1
Philosophy	X						X			2
Political Sci.	X									1
Psych.	X			X						2
Soc. Work				X						1
Spanish						X				1
Speech			X							1
Russian							X			1
Urban Sci.								X		1
Total	3	1	2	4		3	5		1	19

(more)

TABLE XXVIII - (Continued.)
PROJECTED BACCALAUREATE DEGREE PROGRAMS, 1968-1981

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
SCIENCE										
Astronomy				X						1
Astron. & Meteor.								X		1
Computer Sci.				X						1
Earth Sci.				X						1
Geology				X			X			2
Meteorology				X						1
Physics	X					X				2
Statistics				X						1
Total	1			6		1	1	1		10
FINE ARTS										
Art						X				1
Music				X						1
Total				1		1				2
EDUCATION										
Comm. Rec.	X									1
Early Childhood								X		1
Elem. Educ.				X						1
Sp. Path.										1
Kindergarten								X		1
Library Sci.			X							1

(more)

TABLE XXVIII - (Continued.)
PROJECTED BACCALAUREATE DEGREE PROGRAMS, 1968-1981

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SC of A	U of A	U of A Medical Center	TOTAL
EDUCATION - continued -										
Mental Retardation								X		1
Phys. Educ.				X						1
Voc. Tech. Educ.								X		1
Total	1		1	2				4		8
BUSINESS ADMINISTRATION										
Accounting	X									1
Finance				X	X					2
Management				X						1
Marketing				X						1
Total	1			3	1					5
NURSING										
				X			X			2
Total				1			1			2
HOME ECONOMICS										
Clothing & Textiles	X									1
Food & Nutrition	X									1
Total	2									2
AGRICULTURE										
Climatology								X		1
Food Tech				X						1

(more)

TABLE XXVIII - (Continued.)
PROJECTED BACCALAUREATE DEGREE PROGRAMS, 1968-1981

Program & Subject	AM&N	A&M	APC	ASU	HSC	SSC	SCofA	U of A	U of A Medical Center	TOTAL
AGRICULTURE - continued -										
Gen. Engr.				X						1
Indust. Arts				X						1
Natural Resources							X			1
Ornamentals							X			1
Total				3			3			6
ENGINEERING										
Aerospace Engr.							X			1
Engr. Mtl. Sci.							X			1
Engr. Tech.							X			1
Environ. & Urban Engineering							X			1
Oceanography							X			1
Total							5			5
LIBRARY SCIENCE										
Total				X						1
DRAFTING TECH										
Total		X								1
GRAND TOTAL										
Total		1								1
GRAND TOTAL										61

TABLE XXXI

DEGREE PROGRAMS OFFERED IN PRIVATE COLLEGES IN ARKANSAS IN 1966-1967

Program & Subject	Arkansas Baptist College	College of the Ozarks	Harding	Hendrix	John Brown	LRU	Ouachita	Philander Smith	TOTAL
LIBERAL ARTS									
American Civ.							X		1
American Lang. & Lit.							X		1
American Studies			X						1
American Soc. & Theol.							X		1
Anthropology					X				1
Bible			X		X				2
Biblical Languages			X						1
Christian Educ.					X				1
Drama		X		X			X		3
Economics				X	X	X	X	X	5
English	X	X	X	X	X	X	X	X	9
English & French							X		1
Foreign Languages		X		X	X	X			4
French							X		1
Geography					X				1
German							X		1
History	X	X	X	X	X	X	X	X	8
Humanities		X				X			2

(more)

TABLE XXXI - (Continued.)
DEGREE PROGRAMS OFFERED IN PRIVATE COLLEGES IN ARKANSAS IN 1966-1967

Program & Subject	Arkansas Baptist	Arkansas College	College of the Ozarks	Harding	Hendrix	John Brown	LRU	Ouachita	Philander Smith	TOTAL
LIBERAL ARTS - continued -										
Journalism			X	X			X	X		4
Literature					X					1
Modern Languages									X	1
New Testament Greek						X				1
Philosophy					X	X	X	X	X	5
Political Science			X	X	X	X	X	X	X	7
Psychology			X	X	X	X	X	X	X	7
Religion	X	X	X		X			X	X	6
Religion & Speech								X		1
Religious Education					X			X		2
Social Sciences	X	X	X	X	X		X	X		7
Sociology			X	X		X	X	X	X	6
Spanish								X		1
Speech		X	X	X			X	X		5
Speech & Drama								X		1
Total	3	5	12	11	12	12	13	22	9	99

(more)

TABLE XXXI - (Continued.)
DEGREE PROGRAMS OFFERED IN PRIVATE COLLEGES IN ARKANSAS IN 1966-1967

Program & Subject	Arkansas Baptist	Arkansas College	College of the Ozarks	Harding	Hendrix	John Brown	LRU	Ouachita	Philander Smith	TOTAL
SCIENCE										
Biology	X	X	X	X	X	X	X	X	X	9
Chemistry			X	X	X	X	X	X	X	7
Engr. Physics						X				1
General Science	X	X	X	X		X			X	5
Mathematics		X	X	X	X	X	X	X	X	8
Natural Sciences			X				X			2
Physics			X	X	X	X	X	X	X	7
Prof. Chem.								X		1
Total	2	3	5	5	4	5	6	5	5	40
FINE ARTS										
Art			X	X	X	X	X	X	X	7
Art Education							X		X	2
Broadcasting						X				1
Music	X	X	X	X	X	X	X	X	X	9
Music Education			X	X				X		3
Piano								X		1
Piano & Theory								X		1
Theory & Comp.								X		1

(more)

TABLE XXXI - (Continued.)
DEGREE PROGRAMS OFFERED IN PRIVATE COLLEGES IN ARKANSAS IN 1966-1967

Program & Subject	Arkansas Baptist	Arkansas College	College of the Ozarks	Harding	Hendrix	John Brown	LRU	Ouachita	Philander Smith	TOTAL
FINE ARTS - continued -										
Voice								X		1
Total	1	1	3	3	2	3	3	7	3	26
EDUCATION										
Business Education				X			X		X	3
Elementary	X		X	X	X	X	X	X	X	8
Physical & Health Educ.			X	X	X	X	X	X	X	7
Secondary			X	X		X		X		4
Total	1	0	3	4	2	3	3	3	3	22
BUSINESS ADMINISTRATION										
Accounting				X			X	X		3
Business Administration		X	X	X			X	X	X	6
Finance							X			1
General Business				X		X				2
Management & Labor						X				1
Marketing & Advertising							X			1
Secretarial Sciences			X	X				X	X	4
Total	1	1	2	4		1	5	3	2	18
MEDICINE, NURSING, PHARMACY										
Med. Tech.			X				X	X		3
Total			1			-	1	1		3

(more)

TABLE XXXI - (Continued.)
DEGREE PROGRAMS OFFERED IN PRIVATE COLLEGES IN ARKANSAS IN 1966-1967

Program & Subject	Arkansas Baptist	Arkansas College	College of the Ozarks	Harding	Hendrix	John Brown	LRU	Ouachita	Philander Smith	TOTAL
HOME ECONOMICS										
Home Economics (general)				X		X		X	X	4
Total				1		1		1	1	4
ENGINEERING										
Bldg. Const. & Design						X				1
Electrical Engineering						X				1
General Engineering						X				1
Mechanical Engineering						X				1
Total						4				4
GRAND TOTAL	7	10	26	28	20	29	31	42	23	216

TABLE XXXII

NUMBER OF BACCALAUREATE DEGREES AWARDED IN PRIVATE COLLEGES IN ARKANSAS
1962-1963 - 1966-1967

Program & Subject	Arkansas College	Harding College	Hendrix College	LRU	Ouachita	Philander Smith	GRAND TOTAL
LIBERAL ARTS							
American Language & Literature				5			5
American Sociology & Theory					3		3
Anthropology				23			23
Bible		107					107
Christian Education	4						4
Drama			18		7		25
Economics				18	7		25
English	27	54	65	49	49	29	273
English & French					1		1
French			9	5	7		21
German					1		1
History	29	22	40	41	41		173
Humanities				11			11
Journalism		11			7		18
Literature			13				13
Modern Foreign Languages						5	5
New Testament Greek			12				12

(more)

TABLE XXXII - (Continued.)
NUMBER OF BACCALAUREATE DEGREES AWARDED IN PRIVATE COLLEGES IN ARKANSAS, 1962-1963 - 1966-1967

Program & Subject	Arkansas College	Harding College	Hendrix College	LRU	Ouachita	Philander Smith	GRAND TOTAL
LIBERAL ARTS - continued -							
Philosophy & Religion					10		10
Political Science		14		37	22		73
Psychology		44	16	24	32	6	122
Religion	1		15		119		135
Religious Education			9		1		10
Social Sciences	36	39	32	31	1	46	185
Sociology					29	29	58
Spanish					1		1
Speech	11	31			27		69
Speech & Drama				18	2		20
Total	108	334	217	257	362	125	1,403
SCIENCE							
Biology	23	68	100	113	54	27	385
Biology & Chemistry					20		20
Chemistry		19	25	34	45	3	126
Chemistry & Mathematics					1		1
General Science	6	42					48
Mathematics	26	63	33	33	48	11	214

(more)

TABLE XXXII - (Continued.)
NUMBER OF BACCALAUREATE DEGREES AWARDED IN PRIVATE COLLEGES IN ARKANSAS, 1962-1963 - 1966-1967

Program & Subject	Arkansas College	Harding College	Hendrix College	LRU	Ouachita	Philander Smith	GRAND TOTAL
SCIENCE - continued -			5				5
Natural Science							
Physics			16	14	11		41
Professional Chemistry					4		4
Total	55	192	179	194	183	41	844
FINE ARTS							
Art		17	11	23	12	1	64
Music	7		19	14	28	16	84
Music Education		27			27		54
Piano					6		6
Piano & Theory					3		3
Theory & Composition					6		6
Voice		1			6		7
Total	7	45	30	37	88	17	224
EDUCATION							
Elementary		225	65	183	139	319	931
Physical Education		78	10	32	55	25	200
Secondary		47			63		110
Total		350	75	215	257	344	1,241

(more)

TABLE XXXII - (Continued.)
NUMBER OF BACCALAUREATE DEGREES AWARDED IN PRIVATE COLLEGES IN ARKANSAS, 1962-1963 - 1966-1967

Program & Subject	Arkansas College	Harding College	Hendrix College	LRU	Quachita	Philander Smith	GRAND TOTAL
BUSINESS ADMINISTRATION							
Accounting		50		66	51		167
Business Administration	41	44		61	65	29	240
Finance				35			35
General Business		72	88				160
Market & Advertising				34			34
Secretarial Science	3	12		20	37	24	96
Total	44	178	88	216	153	53	732
MEDICINE							
Medical Technology					1		1
Total					1		1
HOME ECONOMICS							
		81			72	17	170
Total		81			72	17	170
LIBRARY SCIENCE							
						11	11
Total						11	11
GRAND TOTAL	214	1,180	589	919	1,116	608	4,626

TABLE XXXIII

GRADUATE DEGREES GRANTED AND FACULTY BY SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS
1962-1967

Code For Master's and Doctor's Degrees

- A. The first series of digits represents the total number of graduates for the last five years.
- B. Next series of digits represents 1966-1967 graduates.
- C. The last series of digits represents the maturity of the particular program.
 - 1. = 5 years old or less.
 - 2. = Between 5 and 10 years of age (inclusive).
 - 3. = Older than 10 years.

Code For Faculty

- A. The first series of digits represents the total number of Faculty members with a Master's degree or better, but less than a Doctor's degree.
- B. The next digit or series of digits represents the total number of holding Doctor's degrees.

(more)

TABLE XXXIII

GRADUATE DEGREES GRANTED AND FACULTY BY SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS,
1962-1967

Program & Subject	A S U		H S C		S C of A		U of A		U of A Medical Center			
	Master's	Faculty	Master's	Faculty	Master's	Faculty	Master's	Doctor's	Faculty	Master's	Doctor's	Faculty
LIBERAL ARTS												
Anthropology											1-2	
Agricultural Economics & Rural Sociology					14-3-3					2-8		
Comparative Literature					13-2-3		7-5-2					
Economics					10-1-3		11-2-3			0-6		
English	64-9-2	3-5	44-13-3	1-3	25-5-3	3-5	192-41-3	24-9-3		7-14		
French					11-4-3					0-2		
Geography					6-2-3					0-4		
German					6-2-3					1-2		
Government					See Political Science							
History	3-3-1	2-5	2-2-3		20-3-3		61-13-3			0-12		
Philosophy						2-0	2-1-3	1-0-3		0-5		
Political Science		0-3					7-0-3			2-5		
Psychology						0-3	35-6-3	12-3-2		0-14		
Social Sciences	19-4-2		32-6-3	3-4	14-1-3	5-4						
Social Welfare							6-2-3					
Social Work										3-1		
Sociology		0-1		0-1			12-4-3			2-6		
Spanish			1-1-3	0-1	0-0-1	1-0	6-1-3			1-2		
Speech & Drama Art		0-1					53-11-3			8-3		

(more)

TABLE XXXIII - (Continued.)
GRADUATE DEGREES GRANTED AND FACULTY BY SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS, 1962-1967

Program & Subject	A S U		H S C		S C of A		U of A		U of A Medical Center	
	Master's	Faculty	Master's	Faculty	Master's	Faculty	Master's	Doctor's	Master's	Doctor's
SCIENCE										
Applied Mathematics							0-0-1			
Biological Science		2-13		2-2		4-5				
Biology	22-8-3		9-4-3		15-7-2					
Botany & Bacteriology							20-1-3	4-2-2	0-8	
Chemistry		1-8		2-3	0-0-2		51-13-3	34-4-3	0-20	
Computer Science							0-0-1			
General Science			3-0-3							
Geology							23-5-3		0-3	
Instructional Science							20-8-3			
Mathematics	33-7-3	2-4	11-3-3	2-2	27-7-3	2-7	115-17-3		2-14	
Natural Science							50-12-3			
Physical Science					0-0-2	5-4				
Physics		0-2			2-1-2		29-8-3	10-4-2	0-11	
Zoology							45-15-3	2-2-2	0-13	
BUSINESS ADMINISTRATION										
Accounting		3-0								
Business Administration			3-1				166-39-3	38-7-2	5-17	
Business Education	25-11-2	2-1	1-0		18-6-3	3-6				
General Business		2-4								

(more)

TABLE XXXIII - (Continued.)
GRADUATE DEGREES GRANTED AND FACULTY BY SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS, 1962-1967

Program & Subject	A S U		H S C		SC of A		U of A		U of A Medical Center		
	Master's	Faculty	Master's	Faculty	Master's	Faculty	Master's	Doctor's	Master's	Doctor's	Faculty
BUSINESS ADMINISTRATION - continued -											
Management								2-1-2			
Marketing								2-2-2			
MEDICINE, NURSING, PHARMACY											
Pharmaceutical Sciences									2-0-2		0-6
Pharmacology									10-4-3	2-2-3	0-3
Anatomy									3-2-3	1-0-2	0-6
Biochemistry									14-3-3	4-3-3	2-12
Microbiology									6-1-3	3-1-3	0-5
Physiology									4-0-3	0-0-3	0-4
Biometry											0-3
HOME ECONOMICS											
Home Economics				1-2			57-10-3		3-3		
Home Economics Education					15-4-2		18-3-3				
AGRICULTURE											
Agricultural Economics							See Agricultural Economics & Rural Sociology				
Agricultural Education	12-5-1										
Agricultural Engineering							4-0-3		6-1		
Agriculture		1-8									
Agronomy							38-9-3	1-1-2	See Crops & Soils		
(more)											

TABLE XXXIII - (Continued.)
GRADUATE DEGREES GRANTED AND FACULTY BY SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS, 1962-1967

Program & Subject	A S U		H S C		SC of A		U of A		U of A Medical Center	
	Master's	Faculty	Master's	Faculty	Master's	Faculty	Doctor's	Faculty	Master's	Doctor's
AGRICULTURE - continued -										
Animal Breeding								0-1		
Animal Industry					30-0-3					
Animal Nutrition							1-0-2	0-1		
Animal Pathology & Parasitology								1-4		
Animal Physiology								0-2		
Animal Science					16-8-3		1-1-2	0-3		
Crops								0-10		
Dairy Science								0-4		
Entomology					24-5-3			1-10		
Extension Education								0-2		
General Agriculture					54-5-3					
Horticulture							12-4-3	2-9		
Plant Pathology					9-3-3			0-12		
Poultry Breeding								0-2		
Poultry Nutrition								0-3		
Poultry Science								0-1		
Soil								1-8		
Vocational Agriculture							1-0-3			

(more)

TABLE XXXIII - (Continued.)
GRADUATE DEGREES GRANTED AND FACULTY BY SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS, 1962-1967

Program & Subject	A S U		H S C		SC of A		U of A		U of A Medical Center	
	Master's	Faculty	Master's	Faculty	Master's	Faculty	Master's	Faculty	Master's	Faculty
ENGINEERING										
Chemical							9-2-3	4-2-3	0-7	
Civil					45-13-3				3-6	
Electrical					46-6-3		5-2-3		8-4	
Engineering					2-1-3					
Engineering Science					12-3-3		2-0-3		4-3	
Industrial					35-9-3				4-4	
Mechanical					11-1-3		2-1-3		3-5	
FINE ARTS										
Humanities					5-1-3					
Music	4-4-1	8-6			0-0-2	2-0	22-7-3		12.2	
Creative Writing							0-0-1			
Art			1-0			0-3	6-0-3		10-0	
EDUCATION										
Counselor Education						6-0	93-23-3	7-1-3	0-4	
Counseling & Educational Psychology		0-8								
Education Administration						1-7	129-25-3	110-26-3	0-4	
Education Administration- City Supervisor	34-7-2									
Educational Administration & Secondary Education		1-7								
Elementary	123-40-3	0-5	105-30-3	1-1	113-21-3	9-2	209-43-3	19-2-3	0-4	
Elementary Principal	53-13-2									

(more)

TABLE XXXIII - (Continued.)
GRADUATE DEGREES GRANTED AND FACULTY BY SENIOR COLLEGES AND UNIVERSITIES IN ARKANSAS, 1962-1967

Program & Subject	A S U		H S C		SC of A		U of A		U of A Medical Center	
	Master's	Faculty	Master's	Faculty	Master's	Faculty	Master's	Doctor's	Master's	Doctor's
EDUCATION - continued -										
Exceptional Children					75-29-2					
Guidance	103-43-2									
Guidance & Counseling			31-20-3	0-3	20-9-1	0-8				
High School Principal	78-19-2									
Higher Education							4-3-3	5-3-3	0-2	
Industrial Education					11-2-2	2-1	11-2-3	2-0-3		
Music-Education			7-2				40-6-3		2-4	
Physical Education & Health	41-10-2	1-3	51-13-3	0-2	54-14-3	3-0	84-14-3	19-2-3	0-6	
Secondary				2-7			85-19-3	38-10-3	1-4	
Special Education	38-20-2					2-3				
Speech-Education				1-0			18-0-3			
Vocational Agriculture-Education							22-2-3	2-1-3		
Vocational Education							4-2-3	2-0-3	2-6	
LIBRARY SCIENCE						0-1				